

MAY 1991



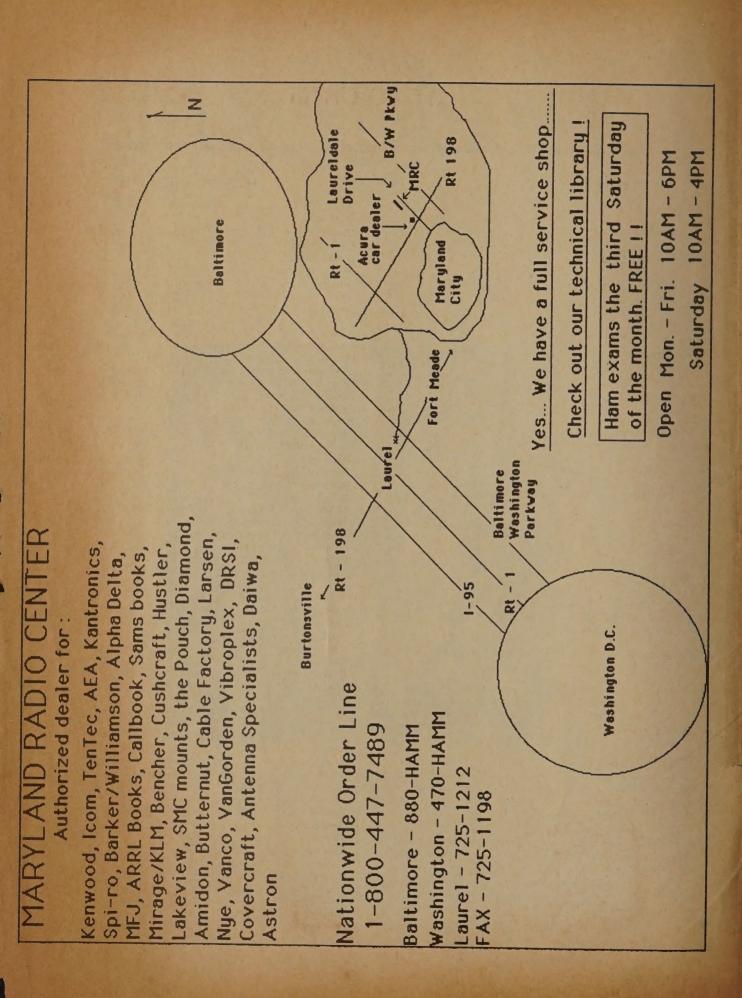
Irene Akers - W3RXJ Named FAR Ham of the Year

See page 33



FCC Highlights © ARRL Report © VE Exam Schedule © Public Service Report DX Column © Feature Articles © Club Reports © Want Ads © Much More

Auto-Call is the Official Journal of the Foundation For Amateur Radio



AUTO-CALL

Official Journal of the Foundation for Amateur Radio

FOUNDATION OFFICERS

Phil Russo, N3GDD Foundation President (301) 552-2918 Tony Young, WA3YLO Executive Vice President (301) 262-1917 Henry Miller, W3BWN Admin. Vice President (301) 474-7376 Robert Armstrong, WA4SQL Vice President (703) 751-2294 Hugh Turnbull, W3ABC Vice President (301) 927-1797 John Chitwood, K3RGB Vice President (301) 799-7360 Bob Moore, N3CKD (301) 776-3571 Vice President Mary Morris, N4TCI Vice President (703) 971-3905 Ed Morrison, W3RY Treasurer (202) 966-4802 Joe Seasely, KA3UZI Secretary (301) 725-5822

AUTO-CALL MAGAZINE STAFF

Editor Ethel Smith, K4LMB (703) 536-8469
Circulation Manager John Swafford, W4HU (703) 536-9537

Deadline for copy is the 5th of the month. All contributions are welcomed, but the editor does reserve the right to edit or reject any portion of any copy.

Permission is granted for copying any material from AUTO-CALL provided credit is given.

AUTO-CALL is published monthly as the official journal of the Foundation for Amateur Radio. Comments made by columnists do not necessarily reflect the opinions of the Foundation. No effort is made to investigate advertisers, therefore no warranty can be implied.

AUTO-CALL has paid subscriptions of over 1500 and a total circulation of about 1800. Copies are sold at local stores and a number of Swap and Complimentary copies are mailed each month. The magazine is entered as third class non-profit matter at the post office at Arlington, VA.

Subscription rate is \$8 a year.
Subscriptions received after the 15th of the month will be started with the following month's issue.

AUTO-CALL MAGAZINE P.O. BOX 7612 FALLS CHURCH, VA 22040-1452

MEMBER CLUBS

Adams County Amateur Radio Society Alexandria Radio Club Amateur Radio Research and Development Corp. Anne Arundel Radio Club Antietam Radio Association, Inc. Arlington Amateur Radio Club Baltimore Amateur Radio Club Baltimore Radio Amateur Television Society Capital City Amateur Radio Society Capitol Hill Amateur Radio Society Chaverim of the Greater Washington Area, Inc. Columbia Amateur Radio Association Department of State Amateur Radio Club Fauquier Amateur Radio Club Frederick Amateur Radio Club Friendship Amateur Radio Club Goddard Amateur Radio Club Green Mountain Repeater Association Johns Hopkins University APL Amateur Radio Club Laurel Amateur Radio Club MADRAS Maryland Emergency Phone Net Maryland FM Association Maryland Mobileers Amateur Radio Club Metropolitan Communications Network Radio Club Metrovision Amateur TV Club Montgomery Amateur Radio Club Mount Vernon Amateur Radio Club National Capital DX Association Naval Research Laboratory Radio Club New Carrollton Amateur Radio Society Northern Virginia FM Association Northern Virginia Radio Club Ole Virginia Hams Amateur Radio Club Pentagon Amateur Radio Club Potomac Area VHF Society Potomac Valley Radio Club Prince Greorge's Wireless Association, Inc. Quarter Century Wireless Association, Inc. Baltimore Chapter #20

Baltimore Chapter #20 Shenandoah Valley Chapter #137 Vic Clark Chapter #91 Washington Chapter #23

Radio Amateur Satellite Corporation
Rock Creek Amateur Radio Association
St. Mary's County Amateur Radio Association
Shenandoah Valley Amateur Radio Club
Southern Maryland Amateur Radio Club
Southern Patuxent Amateur Radio Club
Stafford Amateur Radio Assn
Sterling Park Amateur Radio Club
Tri-County Amateur Radio Club
T-MARC, The Middle Atlantic FM & Repeater Council
Vienna Wireless Society
Washington Adventist Amateur Radio Association
Washington Area Young Ladies' Amateur Radio Club
Washington Radio Club
Woodbridge Wireless, Inc.

PRESIDENT'S CORNER By Phil Russo - N3GDD

President, Foundation for Amateur Radio

Any one who wonders about the past, present or future of Amateur Radio should have tagged along with me on April 6 & 7.

First of all on Saturday night the 6th, I attended the QCWA/FAR Spring Banquet. For some reason I am most always in awe of people who have been hams longer than me. Their experience is almost always in the look on their face. The conversations were stimulating and fascinating at the same time. By in large these people are the pioneers of the Amateur ranks as it was known then, mostly building their own equipment, taking the time and patience for the necessary testing before the finished product is ready to put on the air. It was a very humbling experience to be in the company of so many hundreds of years of knowledge, and I mean that with the highest respect. Also on the agenda as Speaker was Dr. Ron Parise, WA4SIR, Mission Specialist from STS 35 back in December 1990. A fascinating presentation, and the realization that these highly skilled people don't take themselves so seriously that they can't have fun. A very down to earth man. And an excellent photographer too, some of the shots were just incredible! Thanks to Tony Young WA3YLO and John Swafford W4HU for a very enjoyable evening, even if I did get shanghaied to do some last minute ad-libbing. Now I'm one up on W3ABC and N3CKD. Hi, Hi.

Then on Sunday the 7th, I journeyed to Timonium for the last day of the BARC Hamboree. As I walked through the tailgate area the theme for this article came to me. Here I was standing in the middle of probably 60 or 70 years of Amateur Radio. What an incredible education for some aspiring ham, just to walk down these isles of history, everything from the traditional "boat anchors" a whole flatbed truck full, to the latest computer software and hardware. Microwave dishes, junk TV's, what a smorgasbord!!! Something for everyone, I grew up with an appreciation and respect for these things. These are the places I learned the phrase "almost new, almost for nothing", what else would you expect from W3ELS.

So the next time you see a ham with gray hair, or wrinkles, or no hair, that's not an old man, that's a walking, talking encyclopedia. And that junk isn't junk it's a piece of history. So go out and support your local Hamfest, keep the history and education going, I know I will.

See you at Howard County.....73's

Phil - N3GDD

INDEX

COLUMNS	
ARRL REPORT	9
DX COLUMN	13
FCC HIGHLIGHTS	- 7
PUBLIC SERVICE REPORT	19
SRAM - Amateur Radio in the USSR TRAINING	27
VOLUNTEER EXAMINER CO-OP.	17 15
WANT ADS	55
	00
SPECIAL FEATURES	
Congratulations	35
Ham of the Year - W3RXJ	33
School Clubs	25
Skywarn	21
Spring Banquet	32
T-MARC	22
CLUB REPORTS	
Alexandria Radio Club	50
Anne Arundel Radio Club	53
Antietam Radio Association	47
Arlington Amateur Radio Club	42
Department of State Amateur Radio Club	40
Fauquier Amateur Radio Club Laurel Amateur Radio Club	52
MADRAS	48 39
Maryland Emergency Phone Net	41
Metropolitan Communications	38
Metrovision - Amateur TV	37
Montgomery Amateur Radio Club	43
Mt. Vernon Amateur Radio Club	49
Pentagon Amateur Radio Club	44
Southern Patuxent Amateur Radio Club Stafford Amateur Radio Assn	46
Sterling Park Amateur Radio Club	51 45
~ sorming I ark Timateur Itaalio Olab	40
ADVERTISERS	
EEB Electronic Equipment Bank	10
G & G	54
Ham Radio Outlet	6
Maryland Radio	2
Radio Express	24
R.F. Connection	57
Radio Express, Inc.	24
SkyPoint Ham Center Virginia Micro System	61 43
Williams Radio	14
	1 1

Coming Events

1991

ARI International DX Contest
CQ M Contest
Volta RTTY DX Contest
ARRL Atlantic Division Convention & Rochester Hamfest
Roanoke Division League Planning Meeting, Spartanburg, SC
K4AF Armed Forces Day Special Event from Pentagon
Maryland Mobileers Special Event from submarine USS Torsk
Roanoke Valley ARC Hamfest
Wheeling, WV Hamfest/Computer Fair, Sponsored by Triple States
CQ WW WPX CW Contest
Memorial Day Hamfest, Howard County Fairgrounds (See Page 66)
Ole Virginia Hams Hamfest & Computer Fair, Manassas, VA
Frederick Hamfest
Field Day
WVA ARRL State Convention
BRATS Maryland Hamfest (See page 59)
Winchester Hamfest, Berryville, VA
Southern Patuxent Hamfest, Upper Marlboro, MD
Gaithersburg Hamfest
ARRL Roanoke Division Convention, Virginia Beach, VA
Shelby, NC Hamfest
Howard County CARA Hamfest

Please keep Auto-Call advised of important Coming Events. We are anxious to provide our readers with timely information and help you avoid possible conflicts when scheduling activities.

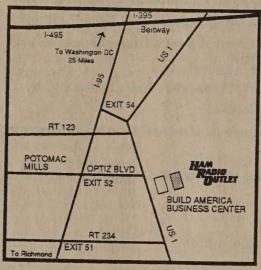
We can use all the help we can get!

^{*} Dates marked with an asterisk (*) are NOT confirmed. The dates shown are best guesses based on the schedules of previous years. Hamfest sponsors are urged to advise Auto-Call as soon as 1991 dates have been established. Thanks to the SouthEastern Repeater Association Repeater Journal for much of the Hamfest date information above.



ORDER TOLL FREE (800) 444-4799

ORDER TOLL FREE (800) 444-4799



CURTIS BROWN WB4KZL **NEW STORE MANAGER**

10 Store Buying Power All Major Brands In-Stock at Discount Prices

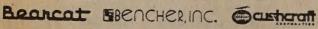




ALPHA DELTA AMERITRON THE













ICOM KEKANTronics KENWOOD





MIRAGE



ACONCEPT SONY VIBROPLEX.



14803 Build America Drive Woodbridge, VA 22191

Hours: 10AM - 5:30PM Monday - Saturday

Metro (703) 643-1063 Local (703) 494-8750

FCC HIGHLIGHTS

by Bill Grenfell W4GF

"The voice of International Amateur Radio Network Net Manager Glenn Baxter, K1MAN, has been banned from a major Chicago area repeater.." ".. according to Hap Holly, KC9RP, who produces the Radio Information Network dial-up service ... "(WESTLINK REPORT 03/01/91)". See also February HIGHLIGHTS regarding FCC's fines (\$3400!) and citations issued to Baxter for his violative operations. A 03/04/91 letter to Baxter from FCC's Special Services Division Chief, Robert McNamara referred to correspondence with Baxter and with his attorney G. Robert Greensburg and wrote: "...I can only conclude that the dispute is no longer a significant problem and that potentially restrictive rule making can be avoided at this time. (Westlink Report, Mar. 15.1991).

"Licensed Amateurs in several metropolitan areas recently have been greeted by badge-carrying FCC inspectors on their doorsteps. If the Amateur is active they ask that he make a contact at high power then a contact at low power, saying they want "to see the difference in signal strength." After an 80/50 watt test, Detroit Office Inspectors thanked the Amateur and left, leaving only their FCC business cards. An FCC Official Advises that this is "...not a case of the Amateur Service being singled out... and cites' surveys of other services including cable TV leakage, AM broadcasting, land mobile systems licensing. "(ARRL-Letter, Mar, 21, 1991).

"The FCC appears to be in the middle of a nationwide investigation to see if overall power limits in the United States Amateur Service should be lowered"... "According to one high ranking official at the Commission, it's Field Operations Bureau "may" once again be conducting what the FCC terms as "power level audits." On the surface, these are nothing more than inspections of various Amateur stations to determine, if possible, the absolute minimum power that radio Amateurs operating on their high frequency bands do require for reliable communications. (Westlink Report, Mar. 15, 1991).

"The FCC has accepted a request for rule making that asks a modification of Part 97... (the Amateur Rules)... to place primary responsibility for the content of all automatically re-transmitted signals in the Amateur Service with the originating station.
"...Authored by N5GAR" .., "the petition was designated RM-7649 with public notice given on March 6 with a 30 day commentary period...open. "This was to be followed by a 15 day period for reply comments. (Westlink Report, Mar. 15,1991).

A "Bill to safeguard Amateur allocations gains support." "Largely as the result of letters from constituents, 23 members of the U. S. House of Representatives have signed as cosponsors of H. R. 73, the "Amateur Radio Spectrum Act of 1991". "March QST, page 42 gives a sample letter."

"The FCC has amended its rules to relocate Novice and Technician Operator Class control operator frequency privileges in the eighty meter Amateur Service band from the 50 kilohertz at 3700-3750 to the segment at 3675-3725 kHz." Commission rules authorize Amateur stations with a control operator holding a Novice or Technician Class operator licensee to transmit telegraphy in the 80m Novice segment. This segment is designed so that beginning Amateur Radio telegraphers can gain actual experience in sending and receiving telegraphy messages. (W5YI Report, 01/15/91).

THE LATEST CALLS ISSUED FOR THE STATESIDE, ALASKA AND HAWAII CALL AREAS WERE:

AS OF 1 MAR 1991 ADVAN- GEN. NOVICE TECH. EXTRA CED KCIZT NIINM KAIYIH WQ1G KB2MJZ AA2DQ KE2ZX N2LUS KA3YNP KD3WA N3IXS WK3I KC4WKA AC4DL KN4XB N5SFY KB50ZX KI5NX AA5XE KC6FSQ AB6BI KK6XE N7QKP KB7MVZ KG7NL AA7HS N8NNB KB8LXY KF8LW AA8DF N9KQN KB9GIH KF9BW WZ9I KBØIMG AAØDU KFØPY NØNBL WH6CLE NH6YI HAWAII AH6LA WL7CBG NL7WI ALASKA AL7MV

FCC Highlights - Continued

....the FCC on Dec. 13 (1990) removed the 5 WPM Morse code requirement from the existing Technician Class Amateur operator license....Implementation of the new rules(took) place on February 14, 1991. Applicants who...already passed the Novice and Technician written requirements during the past year...(were)...immediately eligible for the new Technician Class. The new Technician exam will consist of 55 questions from the current Novice and Technician elements 2 and 3A. (01/15/91 W5YI Report).

A reciprocal operating agreement has been finalized between the United States and Thailand. The agreement became effective December 15th after more than two years of negotiations. Information on applying for an operating permit in Thailand is available from ARRL Headquarters. Tnx ARRL. (Westlink Report, 02/15/91).

The FCC's Private Radio Bureau hosted a presentation on the Radio Amateur Satellite Service, given by several AMSAT-NA leaders on January 11th in Washington, DC. The presentation, lead by AMSAT officers

Loughmiller and King, featured Amateur satellite history, details on current projects and goals, the current state of the Radio Satellite Service, and the role of the Service in such areas as public service, scientific research, education, disaster and emergency preparedness, and technology development.

Under a title Will FCC kill Packet? (Westlink Report, 02/15/91) raises the matter of censorship in packet activity in Amateur Radio, in-part, as follows: The question of whether a SYSOP should censor messages posted on his BBS has been a hot topic for the past year. Banning or modifying the rhetoric of messages has been recommended. This action is not sitting well with the packet radio community that from all indications appears to be ready to do battle with FCC over the issue of immunity from prosecution of PBBS operators for forwarding the postings of other Already, at least one Petition for Rulemaking has been filed with the Commission. (by W9WI of Nashville. (Westlink Report, 02/15/91

Gf

John Johnston - W3BE Named Dayton Hamvention Ham of the Year

John B. Johnson - W3BE, of Derwood, Maryland, has been named *Ham of the Year* by the Dayton Amateur Radio Association. Johnson is well known in the local area for his Amateur Radio activities, both official and unofficial. He has worked for the FCC since 1972 and is presently chief of the Commission's Personal Radio Branch. He was largely responsible for the rewriting of FCC's Part 97 Rules regulating the Amateur Service. The new rules were adopted in 1989. Incidentally, Johnston first came to the FCC as Chief of the Rules and Legal Branch of the Amateur and Citizens Division, replacing Bill Grenfell - W4GF upon his retirement. Bill is still writing the FCC Highlights column every month for Auto-Call.

Johnston has been an active contester since the early 1950s. Then living in Pennsylvania, he became a member (and later President) of the Frankford Radio Club and then, upon moving to Maryland, joined their arch rival, the Potomac Valley Radio Club. He is also an inveterate Hamfest and Convention goer – and frequently a featured speaker.

It was actually "Johnnie's" wife who got him started in Amateur Radio back in 1954. Her father was W8RE and she wanted to keep in touch with her folks. It looks like Amateur Radio owes a debt of gratitude to John Johnston's wife and family!

American Radio Relay League Report

By John Swafford -- W4HU

This ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.

HAMS WERE VITAL LINK TO KUWAIT. Amateur Radio played an important -- perhaps crucial -- role in providing information from inside Kuwait during its occupation by Iraq.

A lone Amateur operator in Kuwait City, using equipment he managed to keep out of the hands of the Iraqis, has, since Aug. 3 -- the day following the invasion -- been sending computerized message traffic to Amateur operators outside Kuwait.

Messages numbering in the thousands were received by Amateurs in the United States, then forwarded to the U.S. Government.

Messages with potentially useful intelligence information were used to confirm reports from other sources within Kuwait, and may sometimes have been the first and perhaps only source.

"The information was legitimate and authentic, no question," a State Department official said. "It was very useful."

"Much of the traffic concerned the atrocities being committed in Kuwait," the Sate Department said. "We also got word that the Iraqis had begun to move large number of Kuwaitis out of Kuwait and into Iraq just a few days before the coalition began its land assault."

Amateur Radio operators on several continents were involved in the effort, as well as one aboard the USS John F. Kennedy, stationed offshore in the Persian Gulf. Traffic with intelligence value coming through the Kennedy connection was used aboard ship as well as forwarded through the radio system to North America.

The Kennedy connection was lost when shipboard radio restrictions were imposed for security reasons a few days before the coalition bombing began (on Jan. 16).

The group used AMTOR via the established APLINK bulletin board system, using several HF Amateur bands; most were already well-established members of the APLINK network, which was designed for efficient message handling.

(See QST for Jan., 1991, and Nov., 1990 for more information on APLINK.)

Amateurs in the Netherlands, Lebanon, and Guatemala, as well as in the U.S., have been mentioned as playing crucial roles.

The identity of the Kuwaiti Amateur (codenamed "Abdul") has been a closely guarded secret; during the Iraqi occupation his life could have been at great risk. Even following the coalition liberation of Kuwait, "Abdul" feared for the safety of several of his relatives still missing and thought to be in the hands of the Iraqis.

And even the Department of State did not know his identity or, for that matter, precisely how the information was reaching the U.S.

"Had the word got out, we feared the Iracis might kill every licensed Amateur in Kuwat," said Frank Moore, WA1URA/9, of Ft. Wayre, Indiana, one of the U.S. Amateurs involved.

The fear for "Abdul's" safety led two Amateurs in the chain, both of whom knew him personally, to ask personal questions only Abdul would know the answers to. His replies "told us new as not operating with a gun at his hear," Moore said.

Portions of this story "broke" on March 3, in The Indianapolis Star, although Amateur Rado was not mentioned, again to protect "Abdul."

Also playing important roles in this operation were Clark Constant, W9CD; Scott Ward N5DST (the USS Kennedy radio operator); Bot Foster, WB7QWG/9; John Troost, TG9VT; and PAØQRS.

NEWS MEDIA GETS OUR MESSAGE. The March 18 issue of Forbes magazine carried a two-page article about Amateur Radio entitled "Communicating with the World." The article, a direct result of the efforts of the League's public relations consultant, Consultech Communications, describes many facets of the hobby, for Forbes's varied audience, and includes at accompanying story on shortwave listening.



the EEB Hamgram

HAM & SWL NEWSLETTER

The HAMGRAM is a free service from EEB to all subscribers (want to subscribe? Just fill in the subscription blank) and is intended to keep you, our customers and readers, informed about new products, special sales, close-out items, club & VEC information, and other news of interest.

You'll see it here before you see it in the big four monthly magazines. Why? Because we don't have ninety day lead times before publication.

We want your inputs: How can we serve you better? Is there a special product you would like to see at EEB? Please use the comment

blank in this issue to reply.

4

EEB, 323 Mill St, Vienna, VA 22188

GSA CONTRACT

EEB is presently negotiating a contract with GSA. This particular contract involves many popular amateur radio products.

Amateur radio equipment gives our government more bang for the buck than most specially designed equipment. It is a well known fact that many pieces of amateur equipment function as well, and some better, than high priced specially designed equipment. The cost savings advantages for purchasing amateur equipment are real and very important in these days of tight budgets.

All items on this contract will be negotiated once per year. Therefore the procurement cycle is reduced in time span, reducing delays, and making fast availability of products.

If you work for the U.S. Government please keep EEB's new GSA contract in mind.

rts 123

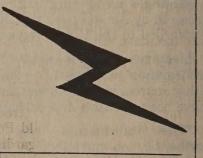


Wanted: Trade-ins

Trader Scott says he needs late model used ham gear and is ready for some real wheeling and dealing.

Now is the time to upgrade to that new state of the art rig.

Also, Scott's consignment sales rack is quite low on stock, so dust off that equipment you no longer need and bring it over and let Scott turn it into cash for you.



HAMGRAM Drawing Entry and Subscription Blank

Name _____

Address ____

City _____

State/ZIP _____

Phone ____

Callsign ____

Directions to EEB

from the Beltway: Exit 11B Tysons Corner - go 9 lights and one block - turn right on Mill Street from Route 66: Exit 17 Vienna - turn left - go 1 mile to Maple Street - turn right - go 2 lights and one block - turn left on Mill Street

EEB is a light green warehouse about 1/4 mile down Mill Street on the right. Look for a 50' tower on the front.

Store Hours ---9 to 5 Mon - Fri
'til 9 on Thur
10 to 4 Sat
Closed Sunday

Washington, DC→

Phones ---- (703)938-3350 (800)368-3270

Electronic Equipment Bank 323 Mill Street, NE Vienna, VA 22180

ARRL Report - Continued

An article in the March 4 INFO WORLD, a weekly trade journal "for power buyers of PC and networking products," stresses packet radio, as well as passing the word about the new codefree Technician license.

Consultech also has assisted several major daily newspapers, including the Dayton Daily News, the Detroit Free Press, and the Fresno Bee, in the recent publication of stories about Amateur Radio, according to Consultech vice president Jock Elliott, KB2GOM.

CITY OF SEATTLE APPROVES TREE AS ANTENNA SUPPORT. A tree is not a "structure." Seattle's Department of Construction and Land use has come to this conclusion following months of legal wrangling. In late February the department rules that John Pollock, KA7MCX, could continue to use a neighbor's evergreen to support his 6-meter halo antenna, despite neighbors' objections.

In the summer of 1989 Pollock, who lives on the side of a steep hill in Seattle, began investigating the possibility of putting an antenna in his next door neighbor's tree. A land use specialist at the DCLU told Pollock there was "nothing in the rules regarding antennas in trees." (Seattle laws limit Amateur Radio antenna installations to 50 ft of tower and another 15 ft of antennas, for a total of 65 ft).

Soon thereafter a short section of tower, rotator, and 4-element 6-meter Yagi graced the top of his neighbor's tree. Pollock already had decided against erecting a (legal) tower, in view of his neighbors' aesthetic concerns.

About two weeks later a DCLU inspector told Pollock that his "illegal" antenna would have to come down. Neighbors already were protesting RFI and TVI, even before Pollock had hooked a feed line to the new antenna.

Pollock filed a written protest and a hearing was held in February. The hearing examiner, after inspecting the installation, ruled that the antenna should be lowered to no more than 65 ft., to conform to the City's law.

Pollock, unable to install the beam anywhere but above the top of the tree, installed a halo antenna, at which point the inspector issued a notice to Pollock and to Wayne that "the violation had been corrected."

Last fall, following continued complaints from a neighbor, the Seattle DCLU informed Pollock that an expert hired to further interpret the City's antenna regulations had concluded that once an Amateur Radio antenna was attached to a tree, said tree then became a "structure," subject to the City's 65-ft. rule. DCLU was preparing to add the interpretation to existing law.

Pollock saw this as a threat to many antennas in the Seattle area; because it was an interpretation of an existing law, current antennas would not be "grandfathered."

Pollock decided to continue the fight.

A hearing was scheduled for December, then postponed to last month. Mike Lamb, N7ML (president of AEA) appeared as an expert witness, as did Adam Kerner, AA7FT, an architect. Danny Eskenazi, K7SS, described for the examiners the role of radio Amateurs in emergencies.

Eskenazi also reminded the examiners of last July's World RadioSport Team Championship, held in Seattle -- the visiting British team had used Jone Pollock's station for their operating site. "They used a long wire extending up THE TREE during the WRTC," Pollock noted.

The hearing examiner declared that PRB-1 (federal pre-emption of local antenna zoning regulations) were outside the hearing's scope, as were RFI concerns.

Two weeks later, the decision came down:

The antenna at issue in this matter is not a structure as defined in SMC 23.84.038. A structure is defined in the ordinance must be "erected on the ground" or "affixed to the ground," An antenna installed in a tree does not meet this definition.

There is no definition for an "artificial structure" in the code. Therefore, there is no basis for DCLU to conclude that an antenna is an artificial structure that the City "intended to regulate by Municipal Ordinance."

"This battle appears to have been won," Pollock says, "but is the war over?" Neighbors could continue to press for more restrictive City regulations, he says. "But the hams in and around Seattle have shown that organized energy and expertise can overturn obviously unreasonable interpretation of laws," Pollock said.

ARRL Report - Continued

MORE IN CONGRESS BACK H.R. 73. Support for H.R. 73 continues to grow in the U.S. House of Representatives. Here are the latest (as of March 13) new co-sponsors of Rep. Jim Cooper's "Amateur Radio Spectrum Protection Act of 1991," bringing the total number of co-sponsors to 43:

Reps. Walter Jones (D-NC); Michael Kopetski (D-OR); W.G. Hefner (D-NC); Frank McCloskey (D-IN); Harry Johnston (D-FL); Carroll Hubbard (D-KY); Bernard Dwyer (D-NJ);

Also, Reps. Edolphus Towns (D-NY); Stephen Neal (D-NC); Arthur Ravenel (R-SC); Ralph Hall (D-TX); Harold L. Volkmer (D-MO); Tim Johnson (D-SC); and Ralph Regula (R-OH); Mike Synar (D-OK); Earl Hutto (D-FL); Tom McMillan (D-MD); Bob Clement (D-TN); Harley Staggers (D-WV); and Rick Boucher (D-VA).

Earlier cosponsors were listed in the last ARRL Letter and in April QST.

ARRL Washington Area Coordinator Perry Williams, W1UED, reports many representatives have been surprised by the amount of mail they have received from Amateur Radio constituents, one member of the influential Telecommunications subcommittee noting H.R. 73 is one of the few Telecom matters having "sex appeal" for voters in his districts.

See March 1991 QST, pages 41-42 for suggestions on how you can help.

MARYLAND MAN RECEIVES FIRST CODE-FREE LICENSE. Robert N. Williams, N3IFY, of Annapolis, MD, has received the first code-free Amateur Radio license. His new Technician Class license was issued by the Federal Communications Commission in mid-March. The historic new code-free license class became effective Feb. 14. Williams took his examination before volunteer examiners of the Laurel (MD) Radio Club.

CLYDE HURLBERT, W5CH, SK. Clyde Hurlbert, W5CH, died March 1 in Jackson, Mississippi, after a long illness. He was 59, and was ARRL Delta Division director and an ARRL vice president in the early and mid-1980s.

In the first two weeks of the new license class, the FCC received 313 applications for code-free licenses, according to the Commission. BRIEFS.

- * On March 2, WM4L/YI was worked by a number of Amateurs on the 20 meter band. The operator, Maj. William Kane, said he was operating from a Cobra helicopter base in southern Iraq, near the site scheduled for peace talks between Iraq and the United Nations coalition countries.
- * Three more Amateurs have joined the ranks of 70-year ARRL members. They are Maxwell Hutchinson, N7CN, of Lake Stevens, WA; Linwood Lessing, K4SV, of Altamonti Springs, Fl; and Frank Gunther, W2ALS, of Staten Island, NY. Way to go, OTs!
- * The FCC has issued a new Fact Sheet No. 201 with updated information about Amateur Radio. Reflecting the new code-free Technician class license, the handout says "Although a person may initially qualify for any of the five grades of operator class, either the Technician or the Novice operator class is the ideal way to become involved quickly in Amateur radio."
- * April QST announces a new kind of Field Day competition: for the best recipe. The goal is to further recognize Field Day as a family activity, as well as to acknowledge that you can only get out of operators what you put into them. Deadline for submission of recipes (to ARRL) is April 24.
- * The first run of the S.F.B. Morse Code Proficiency Certificate program will be April 27, from W1AW. The complete story is on page 54 of April QST.
- * AMSAT-UK will sponsor a symposium on Amateur satellites and digital communications July 25-28 at the Univ. of Surrey. The cost is expected to be about \$85, including accommodations. For more information contact Ron Broadbent, G3AAJ, 94 Herongate Rd., London E12 5EQ England.
- * The 1991-92 ARRL Repeater Directory is on the press, with more than 19,000 listings, including expanded packet, beacon, and special service club entries. The Directoy will first be available at the 1991 Dayton HamVention.
- * A 20-minute videotape on AMSAT and Amateur Radio satellites, produced by AMSAT for showing in January to FCC personnel, is available for loan. Contact the ARRL Educational Activities Department for details.

nnn

DX DX DX

John Kanode, N4MM

DXING ON THE NEW BANDS

Although many DXers have found DXing to be great and with less competition on the new bands, many DXers still have not operated there. Some of the rare DX is now operating only on the new bands due to the fact that the pile ups are more reasonable and orderly. It is easy to work the DX with dipoles and makeshift antennas and without an amplifier. There are stations with multi element beams and quads but no where to the extent of that on 20 or 15 meters. Many have told me that they have failed to work a DX station on 20 or 15 and later they found the same station on 12 or 17 meters and had no problem in working him. Now is the time for stations who do not have the large antennas or amplifiers to take advantage of this DX opportunity.

As time goes by, more stations will become better equipped for the new bands and it will become more difficult for the small station to compete in the pile ups. Also now is the time to work on your Band/Country totals. In several years, 12 will be like 10, dead most of the time and 17 will be spotty at best.

UPCOMING DXPEDITIONS

May 1-? A51JS Bhutan QSL to VK9NS
May 4-12 TW3M Molene Island QSL to FE1JCG
Spring/Summer

4J1 Malyj Vysotskij C9MKT Mozambique certain KP1 Navassa Island

Having problems with landing permission.

Documentation for the ET2A operation has been received and approved at ARRL HQ. Cards for ET2A now can be submitted for DXCC credits.

For those who did not get a 701AA QSL, DL2BCH is now acting as QSL manager for this operation. The logs were retrieved during the liberation of Kuwait and have been sent to Germany. The DX grapevine has it that she has the logs and will have to get QSO data transferred from one format to another. If you sent QSLs for this operation to Kuwait and did not receive a QSL before the invasion, you will have to re QSL.

DXAC NEWS

The DXAC will vote on the Penguin Island petition and the DXCC Rule 3 rewrite on April 29 and will vote on the North Korea petition and the Tatar Republic (USSR) petition on May 27.

Although no formal petition has yet been received by the DXAC, an Italian Amateur might submit a petition to make "THE HOLY HOUSE OF LORETO" a new DXCC Country.

DX CONTESTS FOR MAY

May 4-5 ARI International DX Contest

May 11-12 CQ M Contest

May 11-12 Volta RTTY DX Contest
May 25-26 CQ WW WPX CW Contest

Computer Networking Conference

The deadline for receipt of camera-ready papers for the 10th ARRL Amateur Radio Computer Networking Conference is August 12. Those wishing to submit paper(s) for this year's conference should contact Lori Weinberg at ARRL Headquarters for paper guidelines and/or an author's package. Phone (203) 666-1541 or fax (203) 665-7531.

Topics will include, but are not limited to, HF packet investigations, network development, digital signal processing, digital speech, hardware, software, protocols, packet services, packet satellites, and future systems.

The 10th ARRL Amateur Radio Computer Networking Conference, hosted by the Northern California Packet Association, will be held September 27–29 in the San Francisco, California area.

WILLIAMS * ALINCO WE MAKE HAMS HAPPY!

Right Now-Your New Alinco Is only A phone call away Williams Radio can Ship Your ALINCO When You Wish

Williams Stocks All Alinco Models and Accessories. You'll Love our Customer Service. It's no wonder that Williams was named the #1 Alinco Store in both 1989 and 1990. We carry ONLY Alinco and our Volume and low overhead are an advantage to you.

ALINCO TWIN BAND Mobiles. 45/35 Watts DR-570T - DR-590T

The Twin-Band Alincos have all the features you would ever want. And they are priced many \$\$\$ less. Check Out Alinco Today!

ALINCO 2-METER Mobiles 45 Watts DR-110T - DR-112T

Small, yet powerful, the Alinco 2M mobiles fill your requirements. Subtone encode/decode standard, TT mike and much more. DR-110T-red LCD. DR-112T black LCD w/org. backlite, designed to suit your particular requirement.

We Stock ALL ALINCO Accessories!







DJ-120T - 2-Meters

DJ-160T - 2-Meters

DJ-460T - 440 Mhz

DJ-560T - Twin Bander

Please add \$4.00 shipping UPS. NO Credit Cards. N.C. Residents add 5% Sales tax. Call for VERY Competitive Prices. If you purchase, we'll deduct 1/2 of shipping cost to pay for your phone call. Either way, you'll SAVE \$\$\$ with ALINCO and WILLIAMS.

600 LAKEDALE ROAD COLFAX, N.C. 27235

ORDERS ONLY NOON to 5:00 PM

ORDERS & TECHNICAL 7 to 10 PM

FOUNDATION FOR AMATEUR RADIO Volunteer Examiner Cooperative

Nancy Draheim - NK4U 3513 Old Post Road, Fairfax, VA 22030 (703) 691-0078

SCHEDULE OF EXAMINATIONS 1991

IMPORTANT NOTE: If you now have a Technician class license which was acquired prior to March 21, 1987, have a copy of it available when you decide to upgrade.

EXAMS

- Apr 28 Antietam Radio Assn ARC (Hagerstown, MD) (ARRL VEC) Pre-registration Contact: Norma Jean Bollinger, NC3X (717) 597-8231 (Before 9:00 p.m.)
- May 4 Portsmouth ARC (Portsmouth, VA) (ARRL VEC) Contact: Art Thiemens, AA4AT (804) 484-2857

Middletown VE Team (Middletown, VA) (ARRL VEC) Limited walk-ins Contact: Walt Quitter, NC4B (703) 869-5241

University of Maryland ARC (College Park MD) (W5YI VEC) Walk-in Contact: Scott Rosenfeld N3FI (301) 513-5932

Rappahannock ARA (Tappahannock, VA) (ARRL VEC) Walk-in Contact: Ken Pendleton (804) 453-3383

- May 8 Southern Patuxent ARC (Lusby, MD) (W5YI VEC) Pre-registration requested Contact: Dwayne Kincaid, WD8OYG (301)586-2177
- May 11 Anne Arundel Radio Club (LARC VEC) Pre-registration requested Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083

 Frederick ARC (Frederick, MD) (ARRL VEC) Walk-in
- May 18 Laurel ARC (Laurel, MD) (Laurel VEC) Pregistration desirable Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.

Hampton Roads Radio Assn. (Hampton, VA) (W5YI VEC) Contact: Bill Runyon, N4BDH (804) 487-8611

Richmond (Richmond, VA) Walk-in Contact: Ron Bolton, WU4G (804) 798-5191

Contact: Rick Ogden (301) 845-2670

May 31 Pentagon ARC (Pentagon) (W5YI VEC) Call for Escort Contact: David Boyd, K9MX (703) 659-6241

Stafford Area Repeater Assn. (Stafford, VA) (W5YI VEC) Walk-in Contact: David Boyd (703) 659-6241

Volunteer Examiner Cooperative - Continued

Jun 1 Virginia Beach ARC (Virginia Beach, VA) (ARRL VEC) Contact: Ed Robinson, WD4G (804) 468-0866

University of Maryland ARC (College Park MD) (W5YI VEC) Walk-in Contact: Scott Rosenfeld N3FI (301) 513-5932

Jun 8 PROS (Salisbury, MD) (Laurel VEC) Walk-in Contact: Dave Bridge, KB3MT (302) 436-8360

Ole Virginia Hams ARC (Manassas, VA) (ARRL VEC) Walk-in Contact: Harry Vorhauer, W4PVA (703) 368-0650

Massanutten ARA (Harrisonburg, VA) (ARRL VEC) Contact: Marshal Cooper, N4ZKH (703) 856-8012 (6-9 p.m.)

Anne Arundel Radio Club (LARC VEC) Pre-registration requested Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083

- Jun 15 Laurel ARC (Laurel, MD) (Laurel VEC) Pregistration desirable Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.
- Jul 6 Dept of State/GW University (Washington, DC) (ARRL VEC) Walk-in Contact: Derrill Rohlfs, W3WOX (301) 423-0179
- Jul 13 Chesapeake DX Assn. (Chesapeake, VA) (W5YI VEC) Contact: Bill Verebely, KC4YX (804) 424-4764

Anne Arundel Radio Club (LARC VEC) Pre-registration requested Contact: Nancy Alley, NT3Z (301) 761-7115 or Bob Israel, WC3I 262-5083

Jul 20 Laurel ARC (Laurel, MD) (Laurel VEC) Pregistration desirable Contact: John Creel, WB3GXW (301) 572-5124 after 6 p.m.

Richmond (Richmond, VA) Walk-in Contact: Ron Bolton, WU4G (804) 798-5191

NOTE: All examinations require that you submit:

Copy of your current Amateur Radio license (bring original)

Completed FCC Form 610.

Check for appropriate examination fee.

Fees of individual VEC may vary.

ARRL Exam fee is \$5.25

W5YI Exam fee is \$5.25

Laurel Exams are still free.

Mountain VEC Novice Exams free
All other Mountain VEC Exams \$2.00

While most examinations are offered on a walk-in basis, pre-registration is desirable in all cases.

This schedule of examinations appears each month in Auto-Call Magazine Sponsored by the Foundation for Amateur Radio

Training Classes

Robert Armstrong, WA4SQL 44 South French Street, Alexandria, VA 22304 Phone (703) 751-2294

General, Advanced, Extra Theory Classes, Lusby, MD. Starting May 29 Sponsored by Southern Patuxent Amateur Radio Club. Classes will be held every Wednesday at 6:00 p.m. at the Southern Community Center, Lusby, MD. For information call Dwayne Kincaid, WD8OYG (301) 586-2177.

Novice Training Classes, Baltimore, MD. Sponsored by BRATS. Classes are being held on an on-going basis every Friday evening at American Red Cross; 4700 Mt. Hope Drive, Baltimore (near Reisterstown Road Plaza Metro Station). Class is free; Materials (which you can keep) consist of a book and tape and cost \$19.90. For registration or information, contact Jeff Salamon, N3FHT at (301) 484-1362

Novice and Upgrade Classes, Lexington Park, MD. Sponsored by St. Mary's County Amateur Radio Assn. For further information call (301) 862-2214.

Novice Training Classes, N.W. Washington, DC. Sponsored by MADRAS. For more information contact Larry Zeicheck - N3GKZ (301) 484-6112.

SLOW CODE PRACTICE NET, 28.250 MHz 7 to 8 p.m. Wednesdays. Sponsored by Woodbridge Wireless, Inc.

GENERAL INFORMATION

Alexandria Radio Club Anne Arundel Arlington ARC Baltimore ARC BRATS Chaverim, Inc. Fauquier ARC Frederick ARC Laurel ARC MADRAS Maryland Mobileers Montgomery ARC Mount Vernon ARC NASA/Goddard ARC Ole Virginia Hams Pentagon ARC Rock Creek ARA St. Mary's County ARA Shenandoah Valley ARC Southern Maryland ARC Southern Patuxent ARC Sterling Park Tri County ARC Vienna Wireless Washington Adventists Woodbridge Wireless

Harry Jones - N4CWP (703) 204-1781 Tony Young - WA3YLO (301) 262-1917 Fred Bardsley - WD4DHW (703) 533-0372 Phone 1-800-HAM FEST - VB Jeff Salamon - N3FHT (301) 484-1362 Bob Teitel - W3IDT (301) 654-3484 Bill Mills - KC5PF (703) 937-4090 (H), 818-3955 (O) Steve Bauman - W3FOA (301) 662-4552 Bill Bowden - KD3EC (301) 776-4083 Larry Ziecheck - N3GKZ (301) 484-6112 Bill Dillon - WA3SCW @ WB3V in Packet Ken Nichols - KA3KGL (301) 977-5405 John Forrest - WZ4A (703) 971-3905 Vikki Gigante -KA3PVS (301) 249-2609 John (703) 791-5995 David Boyd - K9MX (202) 697-0630 Walt Ramsey - AK3B (301) 949-3954 Call (301) 862-2214 Guy Black - W4PSJ (703) 722-4952 Vic Curtis - WA3YUV (301) 888-1388 Dwayne Kincaid - WD8OYG (301) 586-2177 Art Nevins - WA4NTP (703) 437-9382 Al Sines - WA3QGA, Box 710, College Park 20740 Paul Wilkins - AB4CY (703) 560-2779 Henry Miller - W3BWN (301) 474-7376 Loyd Davis - K8EI (703) 360-0248

National Capital Area Emergency and Traffic Nets:

Daily:	
1300	Virginia Traffic Net: 7.26 SSB
1800	Maryland Emergency Phone Net: 3.920 SSB
1800	Virginia Sideband Net: 3.947 SSB
1830	Virginia Slow Net: 3.68 CW
1900	Virginia Net (early): 3.68 CW
1900	MD-DC Net: 3.643 CW
1915	Shenandoah Valley Emergency Net: 146.22/.82 FM
2100	Vienna Wireless Society Pow-Wow Net: 28.4 SSB
1930	MD Slow Net: 3.717 CW
2200	MD-DC Net: 3.643 CW
2200	Virginia Net (late): 3.68 CW
2215	Virginia Late Net: 3.947 SSB
	ds & Holidays: 1-11/15 1100/1500: Chesapeake Bay Weather & Traffic Net: 147.705/.105 FM
Sunday	ys:
0900	Sunday Morning Coffee Net: 50.4 AM
1900	Maryland 6 Meter Free State SSB Net: 50.125
2100	Md-DC-NVa Regional EC Net: 146 91/31 FM
Monda	ys:
2000	Woodbridge Wireless Net: 147.84/.24 FM
2030	Maryland Mobileers Net: 146.805/205
Tuesda	ys:
1900	Washington Co. 2-Meter Net: 146.94/.34 FM
1930	Arlington ARES Net: 144.87/145.47 FM
2000	Mt. Vernon ARES Net: 146.055/.655
2000	Montgomery Co. RACES/ARES Net: 146.46 FM
Wednes	
2100	Fauquier Amateur Radio Association Service Net: 147.165 FM
2145	(3rd Weds. of each month) VA Section ARES Appointees Net: 3947 KHz LSB
Thursd	ays:
1900	Four State Net: 147.09/.69 FM
1930	Vienna Wireless Society Emergency Net: 146.085/.685 FM
1930	Carroll Co. Novice Net: 28.450 SSB
2000	Alexandria Radio Club Net: 147.915/.315 FM
2000	Ole Virginia Hams Net: 146.37/.97 FM
2100	Prince Georges Amateur Radio Emergency Service Net: 147.75/.15 FM
2100	Vienna Wireless Society Traffic Net: 28.010 CW
Saturda	
1900	MCNRC Net: 52.25/53.25 and 144.95 FM
Emergen	cy only - as required:

Emergency only - as required: Virginia Emergency Net A (VEN/A): 3910 KHz (7260 altern) SSB VEN/B: 3947 KHz (7240 altern) SSB

VEN/E: 3680 KHz (7050 altern) CW

Note: All times are local (EST/EDT) unless otherwise specified.

Public Service Report

Hank Black - N3ESR (301) 340-8595

Material for the PUBLIC SERVICE REPORT can be left to N3ESR on the WA3ZNW packet bulletin board on 145.090 MHz, called by telephone, or mailed electronically by modem on arrangements, or mailed to Public Service Report, 105 North Van Buren St., Rockville, MD 20850-1860. Deadline for receipt of material is the third of the month.

Deadline for receipt of material is the fourth of the month.

THE VIRGINIA SPECIAL OLYMPICS

On March 22, 23 and 24, 1991 Amateur Radio Emergency Service (ARES) provided communications support for the Virginia Special Olympics 1991 Spring Games.

These games simultaneously took place at 14 different locations throughout Fairfax County. Approximately 800 athletes and 43 amateur radio communicators participated in the event.

Due to the complexity of the logistics for the event, a pre-event mailing was made to each volunteer communicator with location assignments, required equipment, important excerpts from the Special Olympics Coaches handbook and general radio protocol for the event including main and back-up frequencies.

Additionally, a pre-event roll-call style net was held on the 146.79 MHz NVFMA repeater to confirm that the mailing was received, to answer any questions and to update the communicators with information from the event organizer's meeting that was held earlier that same evening.

Two directed nets were set up. One at the Fairfax Red Cross Chapter radio room and the other at Lake Braddock High School. The Red Cross net coordinated communication between all 14 locations using the 147.21 MHz AMRAD repeater. The Lake Braddock net was a simplex net for coordination of all event personnel on the Lake Braddock campus in addition to coordinating communications for the events taking place at that location. Supervisory nets were also conducted on 224.10 MHz NVFMA and 443.800 MHZ RENEX RC repeaters.

The event posed a challenge to effective Communication due to the wide geographic distance between event locations and events taking place inside cement and metal school buildings. A number of pre-event radio evaluation tests were conducted to determine the repeater coverage at each location.

Many communicators used magmount antennas with metal ground planes which proved useful. At Lake Braddock a portable 40-foot outdoor antenna tower was erected for two-meter and 440 operations. The Red Cross and Lake Braddock net controls were completely run on battery power in case commercial power failed during the severe weather experienced during the event.

Amateur Radio served as a critical communications link because each school could make outgoing telephone calls, but due to closed switchboards, incoming telephone calls were not possible. Additionally, continuous amateur radio shadows were provided for approximately ten senior event personnel so they could be instantly reached at any location or on the road between locations.

The amateur radio communicators were thanked by the event staff for a job well done and ARES has already been asked to provide communications for next year's Spring Games. Amateurs participating in the event were:

K4ARU, KC4BQI, N4BV, N4BYF, KB2CEV, N4CWP, WB4EEA, KC4EFJ, KE4ER, N4ESX, KM4FJ, KK4GB, KB4GCR, N4GUS, N7GVC, N3HFC, KI4HK, W8HNT, N4JGQ, KN4JS, AB4JX, W4LFO, KF4LM, KB4LUV, N4NTS, NO7O, KC4OCG, N4OGR, K4OKZ, N4QPB, KA4REI, KC4REQ, KC4RON, N4SCK, N4TCI, N4URL, KB4VLP, KM4VM, KC4WES, WB4WZZ, KA4YMA, KB4ZJ, and KC3ZJ.

(Continued)

FEMA Guidance for RACES Now Available

The Federal Emergency Management Agency in Washington, D.C. has prepared a document called "Guidance for Radio Amateur Civil Emergency Service, CPG 1-15, March 1991." This civil preparedness guide (CPG) will soon be available from the Government Printing Office. Persons interested in this document should contact their local or state emergency

management/civil defense office for more information.

The 3-chapter booklet discusses the purpose, scope and applicability of Radio Amateur Civil Emergency Service (RACES) including the background, definitions, state and local government's and FEMA's role, and, of course, the emergency situations.

FEMA HAS HOME STUDY PROGRAM

The FEMA Emergency Management Institute's home study program currently offers six courses designed both for the general public and persons responsible for emergency management functions.

There are no prerequisites for enrollment. However, one course requires enrolling persons to have a responsibility for emergency radio communications. Courses offered include Emergency Program Manager, HS-1, Emergency Management, USA, HS-2, Radiological Emergency Management, HS-3, Preparedness

Planning for Nuclear Crisis HS-4, Hazardous Materials: A Citizen's Orientation HS-5, and Portable Emergency Data System (PEDS) HS-6 (Restricted to those who have responsibility for radio communications during an emergency, requires an IBM or compatible computer with 640K of memory and 5 1/4" drive).

For more information write to the Federal Emergency Management Agency, EMI, Home Study Program, 16825 S. Seton Avenue, Emmitsburg, Maryland 21727-9986 or contact your local or state emergency management/civil defense agency.

PUBLIC SERVICE CALENDAR

Apr. 20	Dogwood Half-Hundred Mountain Endurance Hike Contact John Birch, KA4YMA (703) 533-3668 or Mike Sawyer, KG5IB (703) 368-4872
May 5	Bethesda-Chevy Chase Parade Contact Hank Black, N3ESR (301) 340-8595
May 18-19	National Multiple Sclerosis 150K Bike Tour Contact Bob Lewis, N4SCK (703) 830-3495 or Ed Ober, KC4EFJ (703) 591-0422 or Dan Gropper, KC4OCG (703) 281-2358
July 4	Fairfax City Parade Contact Bob Lewis, N4SCK (703) 830-3495
Aug. 31	International Children's Festival
Sept. 1	Wolf Trap Farm Park
Sept. 2	Contact Bob Lewis, N4SCK (703) 830-3495

Questions About Amateur Radio Involvement in SKYWARN by Chuck Rexroad, N4HCP

Q. What is SKYWARN?

A SKYWARN is a nationwide network of volunteer observers. This program is an effort to save lives and property during severe weather emergencies. SKYWARN is an element in the community preparedness program of the National Weather Service and part of the U.S. Commerce Department's National Disaster Warning System which alerts people to impending hazards.

Q. Who can join SKYWARN?

A Anyone with the ability to observe the weather and report to the National Weather Service.

Q. How is amateur radio involved?

A Because amateurs can communicate without relying on the telephone system, it was natural for amateur radio operators to act as a severe weather spotters for SKYWARN. There is a two-meter station located at the National Weather Service Washington Forecast Office in Sterling, Virginia (next to Dulles Airport).

Q. What do I need to do to join?

A. The National Weather Service offers training for SKYWARN spotters whether amateur radio operators or not. This training is encouraged so that reports are accurate and use proper terminology. Those interested in joining the amateur radio side of SKYWARN should contact their local ARRL Amateur Radio Emergency Service (ARES) Emergency Coordinator (EC) or the SKYWARN Net Manager for the Washington Forecast Office in Sterling, Virginia.

Q. How do I sign up for training?

A Call Barbara McNaught or Melody Hall at the Washington Forecast Office, (703) 260-0209 during normal business hours.

Q. How do I get more information on the amateur radio aspects?

A Call Chuck Rexroad, N4HCP, Net Manager for SKYWARN in the Washington Forecast Office, at (703) 435-8038 or contact your local EC.

Q. Who are the net control stations for SKYWARN?

A They are people who have volunteered their services to the Net Manager and who have completed a training program in SKYWARN. (Currently, recruitment is underway and a special class for new net control operators will be offered soon.)

Q. How do I know when SKYWARN is activated?

A SKYWARN is activated by the Washington Forecast Office in Sterling, Virginia. This is done by telephone whereby the forecaster does a group page on the National Capital ARES Council beepers. All Washington Metropolitan area ARES ECs will be aware that SKYWARN has been activated. The best way for other amateurs (non-ECs) to be aware of SKYWARN activity is to use a NOAA "weather alert" receiver such as the ones sold by Radio Shack. If weather is severe enough to activate SKYWARN usually there is a SKYWARN Net and the NOAA alert radios have been activated for weather watches or warnings. If in doubt listen to the SKYWARN frequency for your area.

Q. What amateur radio frequencies are used?

A The 147.300 MHz repeater in Bluemont, Virginia is the primary frequency used by the amateur radio SKYWARN net at the Washington Forecast Office. In those areas where operators cannot reach the Bluemont repeater (or those with special needs), operate on their own sub-net having an operator (Continued on page 21) maintain liaison to the main net on 147.300.

Recent T-MARC Coordination Activities

The Frequency Coordinating Committee re-coordinated the Northern Virginia FM Association's 449.75/444.75 MHz repeater at its new location in Falls Church, Virginia, near Tyson's Corner.

The coordination of the Kent County Amateur Radio Club's 146.97 Mhz repeater in Dover, Delaware was modified to account for improvements made to the repeater thereby increasing its service area.

The committee coordinated a new repeater for 447.65/442.65 MHz on the Eastern Shore for the Muddy Hole Repeater Group at Tyaskin, Maryland.

The KA7UEC 443.325/448.325 MHz repeater was re-coordinated from its old location at Greenbelt, Maryland to its new location near Laurel, Maryland.

Reliable mobile coverage from the Hagerstown area to the Cumberland area is now possible after coordination of the new 146.145/146.745 MHz repeater on Cacapon Mountain, south of Berkeley Springs, West Virginia was granted.

The committee approved coordination of new 145.130 and 147.315 MHz repeaters to N4YET in Harrisonburg, Virginia after previous sponsors abandoned the frequencies.

Re-coordination of KA3TWG's 224.220 MHz repeater to a new location near New Castle, Delaware was granted.

The Summit A.R.A. 224.640 MHz repeater received re-coordination from its old location on the east side of Baltimore to a new location in Catonsville on the west side of Baltimore, Maryland.

The committee coordinated proposed new repeaters for 448.900/443.900 MHz to K3CZ in Rockville, Maryland and for 449.650/444.650 MHz to N3ST in Northwest Washington, D.C.

220 to 222 MHz BATTLE IS LOST

It appears that we have lost the 220 to 222 MHz battle with the FCC. However, before T-MARC takes any action regarding the several coordinated operations within this band segment, we will wait until a revised national band plan is adopted.

SKYWARN - Continued

It is important that the liaison station listen to this frequency at all times in case the Weather Service has a special request for information from that area. The two-meter band was chosen due to its widespread use thereby reaching large numbers of amateurs including mobile stations.

Q. What are the plans for the future?

A Use of the two-meter main net with sub-nets where needed for geographical or other reasons will be continued. Consideration is being given to installing packet radio in the Washington Forecast Office. Also, there are considerations for adding another two-meter radio so that polls of distant areas of interest can be made directly while the primary station remains on 147.300 Mhz.

[Editor's note: Chuck Rexroad, N4HCP, is the former EC for the City of Alexandria and recently appointed to the position of SKYWARN Net Manager for the National Capital area.]

Area ARES Emergency Coordinators

MARYLAND	7771 (0.1.1. (0.01) 500 0.409
Maryland-DC SEC:	Mike Carr, WA1QAA (301) 799-0403
Dist. of Columbia EC:	Ken Williams, N3AQG (202) 363-8364
Allegany County EC:	Gay Rembold, W3DFW (301)724-0674
Anne Arundel Co. EC:	Nancy Alley, NT3Z (301) 766-0129
Baltimore City/Co. EC:	Robert Tracey, KA3BUY (301) 665-1909
Calvert Co. EC:	Woody Schwartz, W3ZNW (301)535-1281
Cline Co FC:	VAUAINI
Campall Ca FC:	John Chilefolf IZOON (001) 100 1200
Cecil Co P.U	Dill Dobb, 110220
Charles Co. EC:	, , , VACANT
Dorchester Co. EC:	VACANT
77 1:-1- C- FC-	Rick Orden, NSKU (501)045-2010
Garrett Co. EC:	William Willson, KB3WL (301) 826-8888
Harford Co. EC:	VACANI
Kent Co. EC:	Jim Rorrier, WASUSE (SUI) 100000
Montgomery Co. EC:	Howard Lenhert, K31UG (301) 304-3000
Prince Georges Co. EC:	George Dewees, KA3KIF (301)292-1241
Queen Anne Co. EC:	Walter Brink, W3WPY (301) 643-2933
Compared Co FC:	L. L. VACANT
St. Marv's Co. EC: \	Al Barolet, Note (501) 602-0201
TO U L C. F.C.	VALANI
Washington Co. EC:	Charlie Anderson Nr 3A (301) 733-3001
Wisomica Co. k'C:	VACANI
Warranton Co. FC:	Leo Kilgore KX33 (301)641-4231
SKYWARN Metropolitan Washington	D.C.: Jim McKone (703) 729-0234

Please report any changes in the above list to Hank Black, N3ESR Phone (301) 340-8595 or packet BBS WA3ZNW

MOTOROLA RADIOS

		00	
M100	VHF 136 - 162 MHZ DASH MOUNT 25 WATT MOBILE WITH PL/DPL/CSQ PROGRAMMED ON	T 2 CHANNEL N CHANNELS 45 WATT	\$437.00 \$537.00
M208	VHF 136 - 162 MHZ DASH MOUNT 25 WATT MOBILE WITH PL/DPL/CSQ PROGRAMMED ON	8 CHANNEL N CHANNEL 45 WATT	\$528.00 \$628.00
<u>M216</u>	VHF 136 - 162 MHZ DASH MOUNT 25 WATT MOBILE WITH PL/DPL/CSQ PROGRAMMED ON	16 CHANNEL I CHANNELS 45 WATT	\$618.00 \$718.00
P100	VHF 136 - 150.8 MHZ 5 WATT PORTABLE W/CHANNEL WITH PL/DPL/CSQ PROGRAMMED	HARGER ON CHANNEL 6 CHANNEL	\$448.00 \$538.00
P200	VHF 136 - 150.8 MHZ 5 WATT PORTABLE W/CH 2 CHANNEL WITH PL/DPL/CSQ PROGRAMMED	HARGER ON CHANNEL 6 CHANNEL	\$595.00 \$695
P200	UHF 438 - 470 MHZ 4 WATT PORTABLE W/CH 2 CHANNEL WITH PL/DPL/CSQ PROGRAMMED	ON CHANNEL	\$695.00 \$795.00

Above units carry in depot parts and labor warranty of 3 years.

Delivery within 10 days after receipt of an order.

Prices do not include sales tax or shipping charges

C74CLB7160T MSF5000 100 WATT UHF 440 - 470 MHZ REPEATER
PROGRAMMED ON YOUR CHANNEL WITH PL/DPL/CSQ \$4995.00

100 WATT UHF 450 - 470 MHZ MICOR MOBILE WITH WIDE SPACED TRANSMITTER, PL, AND ALL ACCESSORIES RECONDITIONED

\$395.00

H44AAU318ON MX350 5 WATT UHF 450 - 470 MHZ PORTABLE WITH NEW BATTERY AND ANTENNA RECONDITIONED \$295

Above units carry 30 day parts and labor warranty.

Delivery within 5 days after receipt of order.

Prices do not include sales tax or shipping charges



P.O. BOX 632, CENTREVILLE, VA 22020 (703) 266-1928





T74RTA3803

Elementary School Ham Clubs Spring Up All Over!

by Keith Ward KC4TZJ, Luke Ward KC4UJS, and David Cowhig WA1LBP

Volunteer instructors from the Mt. Vernon Amateur Radio Club have started ham clubs at the Rose Hill Elementary School and the Springfield Estates Elementary School this past school year. We plan to add a third elementary school or high school in Fall 1991. Making Amateur Radio known through demonstrations, finding allies in the schools (patience!!), building support for ham radio among parents, and putting students and hams together in the class room are the main ingredients.

Remember that school teachers and administrators are overloaded and aren't always overjoyed to see a new project suggested by outsiders. Don't be discouraged if your first approach fails. Find someone who is interested at the school and ask them to talk to other teachers. As a friend from Beijing once told David - WA1LBP "Making a friend opens up a new path." Our club is not all that special – your club can find hams to teach parents and students in a local school too!

David Cowhig - WA1LBP started doing Amateur Radio demonstrations at the Rose Hill School for the kindergarten class of his daughter Frances two years ago. Frances' kindergarten teacher, Mrs. Karen Diez, liked the demonstration so much that she arranged for the other kindergarten and first grade classes to come in and see the ham radio demo as well. In October 1989 Rose Hill School students saw a very successful demonstration in which the students heard contacts with hams in Czechoslovakia, England, France, South Africa and throughout the USSR. Principal Steven Adelberg suggested a ham club for the school, and we finally got one going in mid-December 1990 with the help of Vice Principal Katherine Bray. Tom Sawyer-N4BV, John Pinckney - WD4EBY and David Cowhig - WA1LBP are preparing the members of the Rose Hill Ham Club for the Novice test. The club meets every Thursday afternoon.

Amateur Radio For Kids, a 120 page text written for students 9 - 14 years old by elementary school teacher Chuck Bryan - KBØCUS, is our main text; the more complete Tune in the World from ARRL supplements. Chuck allows non-profit organizations to reproduce ARFK without royalty, so after ordering a copy for \$15

from the Missouri Education Center, 1206 E. Walnut St., Columbia, Maryland 65201, we had it photocopied for the students by the Rose Hill PTA. Chuck also organized a group of elementary school ham clubs, now held together by packet radio and the Bacon Bits monthly newsletter. Chuck is KBØCUS @ WB0AEX.KS at the Marlborough Elementary School in Kansas City, MO.

Rosalie White - WA1STO at ARRL head-quarters sent us a helpful information packet for new ham instructors. We started out with 19 students and now are down to a hard core of five. The Mt. Vernon ARC gave the Rose Hill School a subscription to Auto-Call, some ham radio books, and freeware/ shareware Morse code practice programs for several popular computers. The Mt. Vernon ARC also gave Auto Call subscriptions to ten local schools. Next year at Rose Hill we will follow the example of Springfield Estates ham instructors Keith Ward-KC4TZJ and Luke Ward - KC4UJS and meet in the evenings so parents can join in on the fun!

eight year old Keith Ward - KC4TZJ, General Class op Luke Ward - KC4UJS, Dick -KB4DHD, Marci Kant - KM4VM and David Cowhig - WA1LBP demonstrated Amateur Radio all day to groups of very enthusiastic students at the Springfield Estates ES in February. A Ham Club was organized with the help of principal Mrs. Agnes Brown. Keith and Luke decided to encourage PARENTS to join the club and become hams along with their children. At the first meeting, held on Friday, March 1 at an overflow crowd of Springfield Estates, students and parents saw Luke contact a ham in Coeur d'Alene, Idaho on 15 meters and talk with Tom - N4BV, Dave - N4YPR and several other Mt. Vernon ARC hams on the 146.655 MHz repeater. Keith and Luke explained how they had studied together to get their Novice license the previous summer and how people can talk all over the world by Amateur Radio. Two hours later 32 parent, students and a teacher had signed up for the Novice classes and ordered 15 copies of Tune in the World to supplement Amateur Radio for the Kids. Everyone agreed to meet Friday nights 7:30 - 8:30 p.m. for the next 12 weeks to get their Novice license.

Elementary School Ham Clubs - Continued

Instructor Keith and Luke Ward were very pleased with the first regular Novice class meeting the following week. Luke demonstrated the Farnsworth code method and some time was spent on explaining how best to use the Tune in the World code tapes. We expect parents and Ham Clubs students to help each other learn the code on their own during the week, and we will start out each class meeting with a five minute Morse code copy session covering the characters learned to date. Otherwise, we plan to spend most of the classroom time on theory and rules and regulations.

Can you help? We want to set up club stations at the Rose Hill Elementary School and the Springfield Elementary School and get our students get on the air. Some people get their

ham licenses but never get on the air! We can't let that happen. We happily accept equipment donations through the Mt. Vernon ARC, recognized by the IRS as a non-profit organization under section 501(C)(3), so you can take a tax deduction. Any equipment donations are for the students at Rose Hill, Springfield Estates, or other school ham clubs we are planning. Please consider whether that perfectly good but seldom used rig or extra equipment sitting in your shack could be put to use in a school club station or by say a third grader who can't find the money for equipment. We guarantee that your equipment will be put to the best possible use we can imagine - getting young new Hams on the air. Call Keith Ward - KC4TZJ at (703) 922-6545 or David Cowhig at (703) 922-3742 and WA1LBP @ N4QQ.

Springfield Estates Elementary School Amateur Radio Club Putting Students and Parents together in the classroom



AUTO-CALL

SRAM-029

[Soviet Radio Amateur Movement] Edited by Dexter Anderson, W4KM

[Summary translations from the Soviet Amateur Press]
[Comments in square brackets and footnotes are by translator]

[from the January 1991 issue of RADIO magazine]

"YOU MAY + IF = IT'S PROHIBITED"
by Boris Grigor'yevich Stepanov, UW3AX

A CB-type service was finally permitted by Decision of the State Commission on Radio Frequencies of the USSR's Decision. An initial batch of 300 "Ural-R" sets was to be available in Moscow by the end of 1990 and some 250 licenses have been issued in the capital. An attachment to the Decision specifies different standards from world standards regarding channelization and power (0.5 Watt instead of 5 Watts or higher), preventing the importation of inexpensive sets available elsewhere. Before it's too late, these standards should be revised.

"SPLENDOR AND TREACHERY ON THE PEAK" by Yelena (Helen) Vsevolodovna Turubara

The Fifth Amateur Radio Directionfinding Championships were held in the High Tatry Mountains in Czecho-Slovakia in 1990 [exact dates not given].

On the first day, in the women's 144 MHz races, a Korean performed in a "fantastic" 39 minutes, and another Korean came in third in 55.03 minutes. And suddenly the judges' brigade received a protest from the Bulgarian team. Women on the Bulgarian team saw the lead Korean woman complete the race, return to the starting point, and show her teammates a map with the location of the foxes marked. For the first time in the history of the championships, the IARU [representative], taking a laudable position based on principle, disqualified the Koreans.

On the last day, during the 3.5 MHz races, the Korean men tried the same maneuver. Under IARU rules, only the best two out of three count for the team score. The first Korean didn't perform in the required time and received a zero, but the two others, after receiving information from him, won the championship. The Hungarian and Czecho-Slovak teams protested and the judges' collegium, again taking a principled stand, disqualified the violators.

"CQ-U" VHF*UHF*SHF, edited by S. Budennikov, RV3DS.

E_s.

The 1990 E_s-season began 17 May and ended 13 August 1990. In all, there were 23 days with propagation on 144 MHz.

RB5LGX worked HB\$\Phi\$KNR in Liechtenstein. Several of our ultrashortwavers worked TA1D in Turkey, and 4X1IF and 4X1MH in Israel. UD7\$\Phi\$DE and RA6HHT worked UI8VB in Dzhizak (MN30). On 11 June UD7\$\Phi\$DE worked UI8VB and UJ8SCI in Leninabad (MN4\$\Phi\$), giving him his 83rd and 84th oblasts.

On 19 May 1990, UA4API monitored conversations on 144 MHz in Arabic and tried to break in, convinced that they could hear him clearly, but got no reply. Evidently, these were not radio amateurs.

Very-long-distance QSOs took place only on 1 June 1990. UG6AD in Yerevan worked DJ9YE (3069 km), DL2NO (3063), DK2PR (3012), DL1EFJ (3155), and DJØPQ (3152). UD7ØDE in Baku worked DK1KO and DL2YW over distances up to 3500 km.

SRAM-029 - Continued

DX QSLs VIA...

Based on information from SP9TNM, RA3QOC, UZ1AWQ, UA5QDF, UC2ADW, UB4LQA, UA3-123-619, UA4-156-1531, and UA6-101-701. [Selected from 172 QSL routings.]

4K3ODX via RA1OA, 7Q7LA via UZ6AXJ, D68TW via K3ZO, EKØAK via UAØKCL, EKØAQ via UA9OBA, EX8M via UM8MO, GΦGWA/9L1 via UW3DM, HL9HH via UB5QDF (1989 - 1993), HSØAC via K3ZO, HSΦE via WH6R, OD5EH via UW6HS, OH2/UA1CK via UA1CK, RX9J via UC2ABA, SO5BDN via UP2BDN, SO5IWG via UC1IWG, SO9WFC via UB5WFC, TA2AO via UA6HSN, and UWΦY/UAØACA via UAØACA.

"OVERBOARD" ["ZA BORTOM"]² by I. Viktorov

The collective station of the DOSAAF Radio Technical School of the Tatarskaya ASSR in Kazan' is located in two tiny rooms on the seventh floor; while climbing the stairs I was told that the elevator only worked when the inspectors came. Only three or four people could fit into the office of Aleksandr Vladimirovich Novikov, the station chief. The other room was just as small, and those who had come for "club day" but couldn't fit into either room smoked in the hall.

Aleksandr Vladimirovich invited me to sit down, giving me his seat. "You can see our conditions for yourself, you can't turn around. But even this required a lot of effort on our part. There are no premises at all for laboratories or workshops, and without them what kind of work with constructors can there be?" It turned out that basically only shortwavers engaged in construction. Everything at the station was made by them. And well, in a modern way.

Alik Gerasimov had assembled a circuit for amateur teletype and Farid Karimov had installed a computer given to the club by German colleagues. But for the time being, they haven't room to install equipment for packet radio or satellite communication.

I was told that in the 50s and 60s, when the Kazan' Radio Club was in operation, it was located in the center of the city. It had laboratories, workshops, and radio classrooms. The general opinion is that things aren't improving because DOSAAF committees are paying less and less attention to radio amateur construction.

E. Parfir'yev, one of the most experienced radioconstructors in Kazan', points out that, besides DOSAAF, the society of inventors and rationalizers, the trade unions, and the komsomol [party youth organization] engage in technical creativity for workers. The result: Too many cooks spoil the broth.

One attractive idea would be to create a centralized fund for developing individual construction.

E. Parfir'yev stated that the DOSAAF Sport-Technical Clubs have distanced themselves from construction. Enterprises could help with equipment and parts but rarely do.

"That's for sure" agreed Novikov, adding that some enterprises prefer destroying written-off equipment and parts to giving them to the kids. Engineer O. Safiullin explained that this was because the material in question had a high value and no one wanted to bother marking it down. It was simpler to write it off and then destroy it in any way possible.

The Ministry of the Electronics Industry of the USSR was sharply criticized for raising prices on radio parts. A microprocessor sold in the USA for 85 cents costs 50 or 80 rubles. How can students afford microprocessor or digital equipment if their parents earn 150 to 200 rubles a month?

The opinion was expressed that the young generation has lost the taste for building equipment, preferring ready-made equipment bought at their parents' expense. There are hardly any radio circles left in the schools. DOSAAF committees aren't interested in working with constructors.

Many amateur radio leaders aren't qualified. The technical workers at Novikov's school recently got a pay raise; all, that is, but the sport workers. The salary of an oblast' station chief remains 145 rubles a month.

SRAM-029 - Continued

V. Gur'yanov, a shortwaver from Verkhniy Uslon, a rayon center not far from Kazan', was able to organize amateur radio activity and get financing. An interest in radio was expressed by the son of the first party secretary of the rayon, which now has two collective and six individual stations.

"FIRST TIME ON THE AIR -- MORZHOVETS ISLAND" by G. Chliyants, UY5XE

Once during a USSR championship, I was discussing with V. Rusinov, UB5LGM, my long-held desire to get the "ISLANDS ON THE AIR" diploma (IOTA certificate), founded by Geoff Watts in 1960. UB5LGM suggested we organize a radioexpedition to Morzhovets [morzh = walrus] Island in the White Sea.

When I got home to L'vov, I began organizing a team.

On 28 June 1990, Viktor Rusinov, UB5LGM, A. Zaytsev, RB5LT, and I arrived in Arkhangel'sk, where we were met by S. Matveyev, UA1OSM. On 30 June, the other members of the expedition arrived -- Yuriy Anishchenko, UY5OO, and S. Chulakov, UB5LGJ.

An MI-8 helicopter awaited us at "Vas'kovo" Airport. After an hour and a half, we crossed the Arctic Circle near the White Sea. Below us was Morzhovets Island, covered all over with lakes and marshes.

We installed a mast with IV[s?] for 40 and 15m. Two hours later the first "CQ DE 4K3MI" went out over the air. Viktor began to work the first "PILE UP" and the rest assembled and raised the basic tower with the six-element 20 and 15m log periodic YAGI built by Yuriy Anishchenko.

We contacted G3KMA almost immediately and got confirmation that the island had been assigned number EU-119.

It was daylight around the clock. We photographed each other at 0300 Moscow Time! We tried to operate basically on 'phone on IOTA frequencies (14260 and 21260) where we had helpers -- Roger Valister, G3KMA, and Igor' Zel'din, UB5LCV -- but changed mode occasionally, averaging 60% c.w. QSOs.

We were on the air practically without interruption, making an exception only for the world football cup; the island gets only a weak television signal.

The time flew by quickly. The morning of 6 July we packed up our gear and while waiting for the helicopter added up the 4K3MI results. We had 5165 contacts with shortwavers in 102 countries and territories of the world according to the DXCC listing (117 according to the R150S listing). Of these, 1275 contacts were with stations in 148 oblasts of the USSR and 2747 with Europe. We worked 746 Americans, 451 Italians, 303 West Germans, 296 Englishmen, 133 Japanese, and 113 Canadians. The log contains thanks from many of them for the possibility of working a new island for the diploma.

29

AUTO-CALL

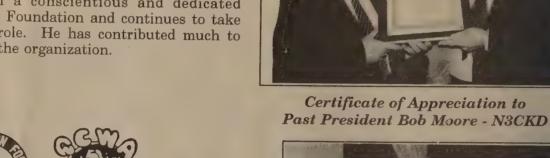
The only sense I can make of the title is that "YOU MAY" [operate a CB-type service] "IF" [you can find equipment, afford it, and obtain a license] [meaning that a CB-type service is] "PROHIBITED."

²This article highlights the important distinction, in the USSR, between what we think of as "amateur radio" and "radio construction" ("construction" for short). The latter is considered part of amateur radio in the USSR even tho those engaging in it are not licensed to go on the air and even tho what they construct (computers, electronic toys) may have nothing to do with radio.

Annual Spring Banquet Awards

Foundation President Phil Russo, N3GDD presented a Certificate of Appreciation to past president Bob Moore - N3CKD for his outstanding service as a three term president and as the chairman of a number of Gaithersburg Hamfests.

Bob has been a conscientious and dedicated worker for the Foundation and continues to take a very active role. He has contributed much to the success of the organization.





Thanks to Tony Young - WA3YLO for all of the fine pictures from the Banquet



#91 President John Swafford - W4HU Honors Ross Reynolds - K3USO With a QCWA Century Award

Banquet Chairman Tony Young - W3YLO Gets Briefed by Ron Parise - WA4SIR Prior to running the Projectors





QCWA Century Awards Ethel-K4LMB, Bill-W3AZ, Elliott-W3JZP And Harry Dannals handing out the awards

Annual Spring Banquet Awards



Armin Meyer, WACE

Ambassador Armin Meyer was presented a QCWA "President's Award" in recognition of his many years of dedication to QCWA and Amateur Radio and his accomplishments as a true international Ambassador of Amateur Radio. Meyer has held several Amassadorial assignments through the world.



Hugh Turnbull, W3ABC FAR Scholarship Chairman

Turnbull and his committee were given
Certificates of Appreciation
in recognition of their outstanding efforts in
connection with the administration of the
Foundation's Scholarship Program.
FAR President Phil Russo, N3GDD at left



(l-r) Bill - W4GF, Jack - W4JT, Frank - K4RE, Harry - W2HD, EM - W4NH, Bill - W4LRD, Ethel - K4LMB
Grenfell Kingman Kratokvil Dannals Mehrling Getchell Smith

Annual Spring Banquet



If you missed the Annual Spring Banquet, you will be sorry when you hear what a great affair it was.

Now jointly sponsored by the Foundation for Amateur Radio and the local QCWA Chapters, the banquet is a continuation of a tradition started by QCWA 35 years ago, and known for years as "The Old Timers' Banquet." As the attendance was broadened to include ALL of the area Amateurs, the Foundation was asked to co-sponsor the affair. And so this 35 year tradition has become known simply as "The Annual Spring Banquet."

The speaker at the Banquet this year was Ron Parise - WA4SIR, the pay-load specialist on the recent STS-35 mission aboard the space shuttle Columbia. He gave a most interesting talk and showed some incredible slides and movies he took from space. He also described the SAREX effort to contact school children during the mission. Ron recently moved from Houston, Texas to the Washington, DC area and has attended a number of local clubs.

Ron Parise - WA4SIR

W3RXJ Named Ham of the Year

The Foundation presented its Ham of the Year award to Irene Akers - W3RXJ.

Irene was one of the earliest Trustees to the Foundation (1957) and has continued to contribute ever since. She has just completed five years as the Corresponding Secretary of the Foundation. In the 1950s she served as coordinator for the Washington Television Committee and for many years she has chaired the ladies' and children's programs at the Gaithersburg Hamfests. She has provided considerable assistance in the preparation of the FAR Scholarship publicity and has always been ready to give a helping hand in every effort of the Foundation.

See the feature article on page 33.



Additional Awards

See the pages 30 and 31 for pictures of awards that were made to FAR Scholarship Chairman Hugh Turnbull - W3ABC and his committee and to Past President Bob Moore - N3CKD for his leadership and special efforts in connection with the Gaithersburg Hamfests.

QCWA President Harry Dannals, W2HD also presented a President's Award to Ambassador Armin Meyer - W3ACE and several certificates to QCWA members in recognition of long time Amateur Radio service. See page 31

Ham of the YEAR

Irene Akers - W3RXJ

Irene Akers was written up as **Ham of the Month** in the February issue of Auto-Call, but this time she is being recognized at the **HAM OF THE YEAR**. She certainly is deserving of this recognition.

We won't repeat the full story again, but it is appropriate to mention that Irene has been working with the Foundation since 1957. She has been one of its most dedicated Trustees, representing several different clubs during that time, and has just completed five years as the Foundation's corresponding secretary. She has done much of the secretarial work involved with the scholarship program and has chaired the ladies' and children's programs at the Gaithersburg Hamfests for many years. Whenever there was a job to do, Irene was always there to do it.

The Foundation for Amateur Radio is very pleased to present this special award to a most deserving lady. (See her photo on the front cover.)

Nomination Wanted

There are many leaders in the local Amateur Radio community who put in a great deal of time and effort and money into developing and carrying out the aims and objectives of the Amateur Radio Service. The only compensation they generally get is an occasionally pat on the back and the satisfaction that comes from a job well done. We would like to see more of these people written up in Auto-Call. It is a bit embarrassing to have other organizations throughout the country recognizing our own local people when we haven't even mentioned them in Auto-Call. Dayton Hamvention has just recognized John Johnston - W3BE as their Ham of the Year and QST recently ran a feature article on Dave French - N4KET. We should have been there first!

They say, a prophet is never known in his own land, and there seems to be a lot of truth to that. Please take a few minutes to send us a write-up on the people in your club or activity who are deserving of recognition. Let Auto-Call feature these people before we get scooped again!

Ham of the Month Criteria

Following are guidelines for nominations for FAR HAM OF THE MONTH. **QUALIFICATIONS:** ANY licensed Amateur in the local area who has contributed significantly to the Amateur service and/or its image in the community.

NOMINATION FORMAT: Nomination in narrative form is preferred. Please be sure the material is factual. We would like to keep the finished article to no more than one page (about 600 words), but you may write as much as you need to do a good job of "selling" your candidate. Any necessary editing can be done later by the committee. In most cases the committee will be in touch with the person who submits the nomination before publication is made.

AWARD PRESENTATION: Whenever possible, Ham of the Month awards will be presented by a FAR representative at a local club meeting or special activity.

For further information contact HAM OF THE MONTH committee Chairman Tony Young, WA3YLO at (301) 262-1917. Send nominations in care of AUTO-CALL.

Reciprocal Operating

The FCC has released a new list of countries with which the U.S. has reciprocal operating agreements. In most cases the forms necessary for U.S. Amateurs to apply for operating permission in these countries are available from ARRL HQ. The following list has been indexed and cross-indexed from the ARRL Letter 1/18/91:

Amsterdam Is.(France) Antigua/Barbuda

Argentina Australia Austria

Bahamas Barbados

Barbuda/Antigua

Belgium Belize

Bermuda Is.(U.K.)

Bolivia Botswana Brazil

Caicos Island (U.K.)

Canada

Cayman Islands (U.K.)

Chile Columbia Costa Rica

Crozet Island (France)

Cyprus

Denmark/Greenland

Dominica

Dominican Republic

Ecuador El Salvador

Falkland Islands (U.K.)

Fiji Island Finland

Fortuna Is.(France)

France

French Guiana
French Polynesia

Gambier (France)

Guiana - French

Germany

Gibraltar (U.K.)

Greece

Greenland/Denmark

Grenada

Grenadines/St. Vincent

Guadeloupe (France)

Guatemala Guyana Haiti

Honduras Hong Kong

Iceland India

Indonesia

Ireland - Republic of

Israel Italy Jamaica Japan Jordan

Kerguelen Island (Fr)

Kiribati Kuwait Liberia

Luxembourg Marquesas (France)

Martinique (France)

Micronesia - Fed. States of Miquelon/St. Pierre Is.(Fr)

Monaco

Montserrat Is. (U.K.) Netherland Antilles

Netherlands

New Caledonia (France)

New Zealand

Nicaragua Norway Panama Paraguay

Peru

Philippines

Polynesia - French

Portugal

Reunion Is. (France)

Seychelles Sierra Leone

Society Island (France)

Solomon Islands

South Africa - Republic

Spain

St. Helena Is. (U.K.)

St. Lucia

St. Paul Island (France)
St. Pierre/Miquelon Is.(Fr)

St. Vincent/Grenadines Is.

Surinam Sweden Switzerland Thailand

Trinidad & Tobago Is.
Tuamoto Archipel. (Fr)
Tubuai Island (France)

Turks Island (U.K.)

Tuvalu

United Kingdom

Uruguay Venezuela

Virgin Islands - British

Wallis Is. (France)

Yugoslavia

Recognitions

Congratulations to Irene Akers - W3RXJ on being named the Foundation's Ham of the Year. (See cover and page 33)

Congratulations to Johnnie Johnston - W3BE on being selected as the Dayton Hamvention Ham of the Year. (See page 8 for more details.)

Congratulations to Armin Meyer - W3ACE on being awarded the QCWA Presidential Award. (See page 31.)

Congratulations to Hugh Turnbull for the Foundation's recognition of his outstanding efforts in connection with the Scholarship program. (See Page 31)

Congratulations to Robert Williams - N3IFY of Annapolis, Maryland on receiving the first code-free license issued in the country. And

Congratulations to Laurel VE Team on administering the code-free exam to Williams.

THANK YOU to Brien Green - W3COE for volunteering to join the team assisting in the Widow's Assistance program.

Congratulations to Walter Cronkite who has recently received his Amateur Radio license.

Please send items for this column

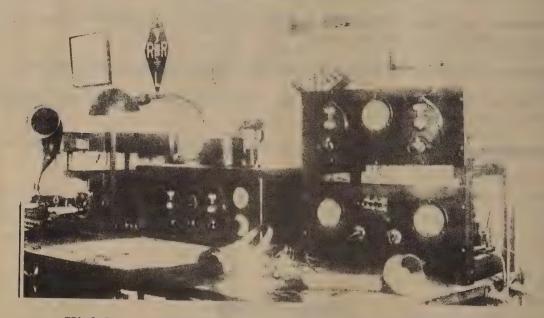
Special Events

- May 17-19 ARRL Atlantic Division Convention & Rochester Hamfest
- May 18-19 Roanoke Division League Planning Meeting, Spartanburg, SC
- May 18 K4AF, the Pentagon Amateur Radio Club station, will run an Armed Forces Day Special Event on Armed Forces Day. For a QSL, just send an SASE with your card. For certificate, please include \$1.00 to cover our postage and handling costs. The station will be on all day May 18 and will concentrate on 35 KHz above the bottom of the cw and phone segments of each band.
- May 18 WA3PJQ, The Maryland Mobileers Amateur Radio Club will be operating a Special Event from aboard the submarine USS Torsk during Armed Forces Day to honor the Submarine Service. The station will be on the air from 1400Z to 2100Z on 7.240, 14.240, 21.340, 28.340 and 146.805 MHZ. For certificate, PLEASE send SASE to MAARC; P.O. Box 935; Severn, MD 21144.
- May 26 Memorial Day Hamfest, Howard County Fairgrounds (See page 56)
- June 2 Ole Virginia Hams Hamfest & Computer Fair, Manassas, VA

Nostalgia Ham Radio Circa 1927 by Al Corio - W1BVW / W4KSA

Back in the days of "breadboading," when you "rolled your own," the ARRL Handbook was your guide and Navy gear was your model. Amateur Radio had captured our imagination. Vacuum tubes were beginning to replace spark gaps and "cat's whisker" crystal detectors.

After long hours of code practice, we decided to build the handbook's "Hi-C" transmitter. Since bread-boarding didn't seem to do our hobby justice, we decided to dress it up a bit. Metering was provided for the UX-210 oscillator, the 550-750 volt rectifier and a thermo-couple for the antenna current. Two 5"x8" 2000v Flectheim capacitors were mounted under the table (with 750 volts on the plate, the 210 glowed a beautiful cherry red.)



Hi-C Transmitter and Aero Kit Regenerative Receiver
Powered by "B" Eliminator and feeding Zepp antenna with ½" copper tubing

The "regenerative" receiver was customized from an Aero Kit and powered by a "B" eliminator. A fundamental 40 meter, voltage fed Zepp antenna 131 feet long was used. (Note copper tubing feeder to the right of the transmitter.) Quarter inch copper tubing was standard for oscillator tank circuits then.

We shopped around for a plumbing supply shop and found only ½ inch copper tubing available. Mr. Plumber advised me that was "what everyone was using," and that was what I needed. When I mentioned that the Handbook specified quarter inch tubing, he rolled back in his squeeking swivel chair and said, "Boy, what are you building?" I explained best I could. A wide grin from ear to ear came over his face as he promised to order me some on a special order. (Remember now, this was in 1927, during the Prohibition Era. "Every one was using" ½ inch copper tubing for their stills!)

The station served as one of the original Army Amateur Radio System units (forerunner of MARS) along with Clark Rodiman - W1SZ and Ed Battey - W1UE at ARRL Headquarters. It also served as a training center for several aviators of the day who were anxious to learn the code.

NOTE: The original photo was not available for reproduction so a screened copy of a copy was used here. The photo was taken using magnesium flash powder (this was before flash bulbs were available). Al says it took ten minutes to clear the cloud of smoke after each flash!]

Metrovision Amateur TV Club FAST SCAN - COLOR - ATV

Meetings: Quarterly: Call for next meeting time and place.

WA9GVK/4 (Video and Audio) 425-431 MHz in; 438-444 MHz out

Also accessible on 144.970, simplex, audio.

On-the-air: Sundays at 8:00 p.m.

Repeater:

Metrovision, Inc., P.O. Box 8231, Falls Church, VA 22041 Dick - WB3EPX (301) 439-8135 Mailing:

Information: Gene - AD3F (301) 774-5307

The first Metrovision meeting for 1991 was held at the QTH of Dick - WB3EPX on March 7 with fourteen members in attendance. We all had a most enjoyable evening together and we made some preliminary plans for the 1991 calendar year. Our Summer picnic will be held in late June or early July at the QTH of Jim -KA4CKI. Our annual sit-down dinner this

year will actually be a train trip (with meals) through Western Maryland sometime in late September or early October. Details will be announced at a later date, as soon as they are finalized. We want to thank both Jim -KA4CKI and Bob- KC3VO for their help in

planning these two events.

At our March meeting, we also discussed the rebuilding of the 400 Mz ATV repeater for which Bruce - WA9GVK has already ordered the necessary part. We also discussed the formation of a technical committee in order to help Bruce maintain the repeater site. Other topics that we considered were an ATV display at the Sterling, Virginia library, and participation in the Virginia Special Olympics. We will have more information on these items as they

become available and we will make them known here in Auto-Call.

All of us here at Metrovision would like to express our deepest sympathy to our fellow member, Ed Westbrook - W3EW, who lost his wife Connie in an automobile accident on March 9. The club has received the following note from Ed:

Dear Dick and fellow Metrovision members - I want to thank you all for the beautiful sympathy card you sent me on the death of my wife Connie and your kind thoughts and feelings I felt came with it. I hardly went out anywhere without Connie, but she understood that the Metrovision Club meant a lot to me and felt that it was very worthwhile.

> Sincerely. Ed Westbrook - W3EW.

The photographs presented below and on the next page are from the March meeting. We hope to present more next month.

See you on ATV

Dick - WB3EPX



(l-r) Dave - W3PJM, Lee - N4LKJ, Bob - KC3VO, Ed - W3EKT

Metropolitan Communications Network

Representing Six Meters in the Greater National Capital Area

Meetings: Quarterly, on the second Sunday of the month.

Time and place to be announced.

Repeater: N3AGB/R, 52.250 MHz in; 53.250 MHz out.

On-the-air: Saturdays at 2000 hours (During Daylight Saving Time)

Mailing: Bob Sporn - WA3GGO, 9927 Cottrell Tr, Silver Spring, MD 20903

Information: Bob Sporn - WA3GGO (301) 434-1719

Congratulations to La Reintz (Tony) Johnson - N3FAJ who has upgraded to Extra. His new grade will take him clear into the next millennium; his ticket will be good to the year 2001! John B. Creel, Jr. -WB3GXW, VEC of the Laurel ARC, advised us that 74 tests were given in January, 71 in February, and 80 in March. 60% upgraded. John attributes this to the fact that about 10% participated because of the new "no-code" aspect of Technician license, and a 20% increase due to the newly generated interest in Amateur Radio because of the Gulf War.

THE SUNDAY MORNING COFFEE NET (50.4 MHz) AM AT 0900 HOURS EDST.

In addition to our regulars, we greet Leland (Lee) Hughes - WA2VPH to our net. Check-ins have increased and we expect new ones as soon as the new Hams get their gear.

MARYLAND FREESTATE SIX-METER SIDEBAND NET (50.125 MHz) SUNDAYS AT 2000 HOURS EDST. Please note that with the advent of Daylight Saving Time, this net will meet at 2000 Hours.

At the time of this writing, the plans of our third quarterly get-together have not crystallized. The choice is between a business meeting on Sunday, June 9, as 1400 Hours at the QTH of Frank Hipsley - WA3ZAR, or a picnic or both. The June issue of Auto-Call will have the answer. Until then, join us on any of the three nets.

Bob - WA3GGO

Metrovision Amateur TV Club - Continued



Gene, AD3F



Ruth, K3AGR



Sam, N3GHY

MADRAS

The Maryland Apple Dumpling Radio Amateur Society Inc.

Meetings: 2nd and 4th Tuesday of the Month - 7:00 p.m.

At the WKYS conference room in the NBC Building,

4001 Nebraska Avenue, N.W. Washington, DC

Repeater: Mailing:

444.100/+ MHz 145.450/- MHz P.O. Box 2468, Wheaton, MD 20902

Information: Larry Zeicheck, N3GKZ (301) 984-6112

SCHEDULE OF EVENTS:

May 14 - Regular Tuesday meeting at 7:00 p.m. The program will be "Bio-effects of RF." Recently hams have needed to become more aware of the biological effects to ourselves and others caused by our transmissions. Find out what is fact and what is folly in this presentation given by Nicole Adaniya, N4YKR.

May 28 - Regular Tuesday meeting at 7:00 p.m. The program following this meeting is To Be Announced. If you are interested please give John Kingdon KA3VJH (301)-816-9394 a call for further details.

CLUB NEWS

The MADRAS Novice class is currently meeting Saturday mornings. Please call Larry N3GKZ at 301-984-6112 for details if you would like to join.

PUBLIC SERVICE: Madras volunteers will help out during the Washington Area Memorial Day Parade on May 27. If you would like to volunteer please call Jon Albers at 301-258-1180

CONGRATULATIONS TO:

Larry N3GKZ for his upgrade to advanced. Good going!

Laquetta KK4WQ, Ernst NQ3X, Jon KA3OVK for their new Kenwood 850's!!

UPCOMING PRESENTATION HIGHLIGHTS:

June 25 Wire Antennas, Ernst Gearels, NQ3X.

A part of each MADRAS meeting is a presentation that is either technical or operating in nature. We have a few programs that we are willing to present to other clubs in exchange for your club making a presentation to us. For more information, contact John Kingdon KA3VJH.

More information on club activities is available from Larry Ziecheck N3GKZ.

YL First Ham Operator?

The first broadcast by a "ham" operator may have been by YL Elinar Dessau of Denmark in 1909 when she used a short-wave transmitter to converse with a government radio post about 6 miles away.

Submitted by Jack Clark, W9HJM

W3DOS U.S. DEPARTMENT OF STATE AMATEUR RADIO CLUB BANQUET

FRIDAY MAY 3, 1991 FORT MYER OFFICERS' CLUB

Guest Speaker: Tom Warren, K3TW Slides & Narrative on travels in East Africa

Cash bar will open at 6:30 p.m. - Dinner will be served at 7:30 p.m.

MENU Salad, Breast of Chicken Cordon Bleu, Baked Potato, fresh Veg., carrots, Rolls and Strawberry Parfait

Tickets are \$17.50 each Advanced reservations are required.

Please make check payable to DOSARC. Mail early to Jane Dorset, KG3R 1017 N. Daniel Street Arlington, VA. 22201

Tickets will be held at the door.

For information, contact Jane Dorset, KG3R, (703) 525-1488 (evenings) or any Club Member on the 145.19 repeater.

Thanks for Those QSLs Ken Easton, N3LY

As far back as 1931 the dream of some day talking to a radio operator in some far away place began. I was in the Boy Scouts and trying to earn a merit badge in radio. We used to listen to short wave radio stations and only hope that some day we might participate. Many years later the dream came true when I received my first Amateur license.

My first QSL cards were sent direct and not through the QSL Bureau. Some of the contacts I would make on the weekend contest were entered in my log but I didn't think about sending QSL cards. Then someone gave me the QSL Bureau rules for outgoing and incoming mailing of cards. I complied and mailed my self-addressed envelopes. Since then I have received many QSL cards through the third call area QSL Bureau in New Kingstown, Pennsylvania. Some were dated as far back as a year or more.

I, for one, would like to thank all of those people behind the scene who volunteer their valuable time and efforts to take care of QSL filing and mailing. It is appreciated.

Ken, N3HLY

Maryland Emergency Phone Net

Meetings: Every night, 3920 kHz, 1800 local time (All are welcome)

Net Manager: George Korper, WD3W Secretary: Jim McCoy - N3EI Treasurer: Rino Masso, KC3ZJ

Directors: W3DQI, W3LDD, KD3JK, NF3X (Alternate)

FAR Representative: KC3ZJ

The Maryland Emergency Phone Net (MEPN) is a club, a member of the National Traffic System (NTS), and meets every night on 3920 kHz at 1800L for the purposes of training operators in net procedures and traffic handling; to handle traffic for Maryland and the District of Columbia; and to establish communication links in these areas so that, in the event of an emergency requiring Amateur Radio communication assistance, the MEPN will be prepared to exercise these links until the emergency subsides.

All Radio Amateurs are invited to participate in the MEPN, and those wishing to join the club and receive the monthly bulletin and rollcall sheet should contact either WD3W or N3EI. Yearly dues are \$7.00. There are currently 61 members.

First of all, congratulations to Bob - KD3JK who has been elected director, replacing Charlie - NF3X; Also Jim - N3EI, who is replacing Bob - K3ONU as net secretary. The MEPN thanks the outgoing officers, and welcomes the new ones.

As this goes to press, the MEPN is planning its first formal meeting of the year at the Timonium Hamfest. The second meeting will be at Gaithersburg in September. All hams are welcome to drop by our meetings and say hello. We may even try to recruit you!

Orville - N3AGM is back on the air, after going through multiple by-pass surgery late last year. He reports he feels better than ever, and we welcome him back in good health. Brian - KA3WWI, harmonic of Gordon - WJ3K, has picked up both a 3rd—Region and packet liaison assignment, and is doing a fantastic job (and still young enough to be looking forward to life as a teenager!). Jim - N3EI, who is a very active QRPer, checks in with his emergency power station at every opportunity. Dan - W3SWD is setting local records with his 3rd—Region traffic totals.

Al - KJ3E reports that the major node for packet traffic into this area has been moved to the BWI node on 145.05. The MD Packet Traffic Net (MPTN) is moving loads of traffic, and the MEPN could use some more liaison stations from this mode. Packet is coming into its own in the traffic nets, but we still need more consistent liaisons, who fully understand the protocols, before this is a really viable means for traffic flow. I guess I am saying, HELP!

Al Brown - WA3FYZ, aka ZF2LY, was active from the Cayman Island group in February and made over 500 contacts, we understand. Page - WA3EOP is his QSL manager, so drop Page a card and SASE if you worked Al.

Page is also the chairman of the Maryland QSO Party, sponsored by the Antietam Radio Association. Last year's event was a good one, and this year's should even be better. Mark August 17/18 on your calendar now, and help put Maryland on the air!

The MEPN also has active liaison with both MDD and MSN. If CW is "your thing," we could use you to handle traffic to/from these two nets. MDD meets at 1900L and 2200L, and is the high speed CW net for our section. MSN (Maryland Slow Net) meets at 1930, and not only handles traffic at "your speed," but also offers training in the CW art of traffic handling. Listen in, and check in when you feel comfortable. MDD: 3643 kHz; MSN: 3713 kHz.

Hope to see you ON THE AIR!

Pud - W3DQI

Arlington Amateur Radio Club

Meetings: Second Tuesday of each month at 7:30 p.m.

Arlington Red Cross Chapter House, 4333 Arlington Blvd. (Rte. 50)

Tuesdays (except meeting nights) at 7:30 p.m. on 144.87/145.47 MHz FM

Info: Rick Bunn, N4ASX Phone number (703) 685-7765.

President's Notes:

Net:

The good weather is here and public service events seam to be the order of the day. The Cherry Blossom parade went off well with some members participating on April 6th and on April 7th we had the M.S. Super Cities Walk. This was a fund raiser covering three courses in the area. One 10 mile course went from the Pentagon north parking to Glen Echo park. We had N4ASX at Pentagon, AF2B, Tom at the Iwo Jima Memorial, Rich, KA4GFY was at 34th and M., Tom N4BYF was at Fletcher's Boat House and had one of the toughest jobs. Tom was one of the last to be able to leave because there were 4 walkers who stopped there and transport did not get to them until the course was all but clear. A special thanks to Tom for his efforts, Terry WI3T was at Lock 6 and was one of the first members on site. Frank N4ZHG was way up at Sycamore Island. Harry, N4CWP, was sent up to Glen Echo Park at the end of the track to help coordinate the logistics. He was up there at 7:00 AM. A thanks to all who helped out. When the organization has poor preparation or doesn't have any idea on how to use our help, that's when we are most needed.

The only bad part of the operation was the JAMMER, "HANGIN'S TO GOOD FOR HIM".

Meeting Minutes

I missed the last meeting but understand that John, KW4U, did a masterful job at running the meeting. Jim, AB4YP, arranged for an ARRL lobbyist to talk about bills before congress that may affect our frequencies.

Next Meeting(s)

The next meeting will be April 16th. The program will be on time standards and presented by a guest from the National Observatory. John KW4U arrange this one. The May meeting will be the final planning meeting for FIELD DAY, If you wish to act as band captain please let Jim, AB4YP, know and he will get you started on planning your part in field day. Two future programs are in the wings and will be announced later.

ARES

The second ARES training meeting had about the same participation as the first. Future training sessions will be scheduled when ARES volunteers feel the need.

Rick - N4ASX

FOUNDATION FOR AMATEUR RADIO Widow's Assistance Program

The Foundation's Widows Assistance Program has been in operation for many years and has accomplished a great deal for the families of our Silent Keys. The program offers to help widows (and other family members) evaluate and dispose of radio equipment in Amateurs' estates. Listings of Estate Sales are carried in the Shack Sales of Auto-Call free of charge and major items are offered for sale at local Hamfests. No fee or commission is charged the families.

Interested parties should contact a local Foundation member club or call the Widow's Assistance Program directly. Call chairman Bob Murnane - N5QLB at 301-820-9432

The address is 712 Lomax Street; Easton, Maryland, 21601.

Montgomery Amateur Radio Club

Meetings: 1st and 3rd Wednesdays of each month at 7:30 p.m.

Executive Office Bldg. Montgomery Co. Government Center, 101 Monroe St., Rockville, MD. Park underground on G-2. 146.04 in (Rockville & Germantown)/146.64 out (Rockville) M.A.R.C., P.O. Box 611, Gaithersburg, Maryland 20877-0611

Information: Jeff Horlick - KZ3F (301)258-0112; Steve Todd - K2IYQ (301)253-4172

Training: Ken Nichols - KD3VK(301)977-5405; Dick Hayman - K3DML (301)251-8721

Beginning February 5, 1991, MARC conducted combined Novice, Technician, and No Code Technician license classes, leading to an examination session for all license classes, Novice through Extra, on March 21 at the Gaithersburg High School. More than 30 students, including 8 or 9 YL's, enrolled. Of those, about half stated a firm intention to pursue the 5 w.p.m. code element! By mid-March, all but two of those who signed up for code had already passed the 1A code element!!

Repeater:

Mailing:

By general consensus, these classes were the most successful ones ever held by MARC. Appreciation and congratulations are expressed to each of the volunteers who gave unsparingly of their time and energy. Most of the volunteers were listed in last month's issue of AUTO-CALL. But a special thanks is again due to Ken-KD3VK (formerly KA3KGL) for the overall coordination of MARC's training program and to John - KV3B who single-handedly (and barefisted) taught the twice weekly code sessions.

In addition to these classes, MARC also held its first-ever W5YI exam licensing session in conjunction with its regularly scheduled meeting on Wednesday, April 3, 1991. Dick - K3DML, MARC club president Steve - K2IYQ, and Repeater Chairman, John - KV3B, were the VE's of record for this special session—intended particularly for would-be upgrades.

Four times each year, MARC holds a change-of-pace dinner meeting at Ernie's Pizza Parlor at the Quince Orchard Shopping Center. The first such meeting was well-attended in February. Club members enjoyed each other's company, Ernie's hospitality, and a short business meeting.

At the next regularly scheduled (non-dinner) meeting, the regular format was resumed, including both a business portion and, following a short break, a program. MARC meetings

exhibit versatility and technical vitality. Recent programs have included multi-media presentations on the following subjects:

SATELLITE TRANSMISSION TRACKING ON HF AND 2 METERS. Sometimes erroneously, sometimes accurately referred to as "moonbounce", this aspect of the hobby is gaining in popularity as knowledge about the subject becomes more widespread, and satellite technology continues to push the envelope. Club President Steve (K2IYQ) gave a fascinating program on this topic.

CADWELD (Registered TM) PROFESSIONAL GROUND ROD CONNECTIONS. Recognized for over 40 years as the best electrical connections in the industry, the CADWELD 'one-shot' product is of interest to hams for its ability to provide superior grounding. The CADWELD difference is in its ability to create a permanent molecular bond. MARC's appreciation is expressed to Joel Knoblock of RF Connections for his presentation.

Erinn - N3HSA Bob - WK3C



Pentagon Amateur Radio Club

Meetings Monthly, on the second Wednesday of the month. Noon.

PARC clubroom (5B272), The Pentagon

Repeater: K4AF/R, 444.55 MHz. CTCSS 88.5 sometimes in effect.
Packet: 145.07 Digi - K4AF, Mailbox - PARC, Node - PNTAGN

Mailing: P.O. Box 47063, Washington, DC 20050

Information: David G. Boyd - K9MX (703) 695-2020 or (703) 659-6241 or William Klein - N4VBW (703) 697-8157 or (703) 590-2546

The Pentagon ARC has new officers. Bill Klein - N4VBW is the new president and Bob Bonn - N4YZU is the new First Vice, and remains chief house keeper. Harry Mamaux - K3NF is the Second Vice President, and Gene Smith - KA5NLY continues to be stuck with the dirty work as the Secretary/Treasurer. Dick Lum - NH6E still holds the seat for the club kibitzer and the old president, Spike - K9MX has joined his predecessors in loafing even harder than before.

Now that the war is over, the club will be restarting noon-hour license testing, kicking off the first major session on 31 May. The club remains open to visitors, especially during lunch hour when most of the regulars are heating lunch in the microwave oven, telling tall DX stories, or sleeping on the couch.

The new computer, a 386 machine, has been ordered to support the secretary's

administrative tasks and what we hope will be a more extensive and useful packet setup.

Armed Forces Day and Field Day planning are well underway, with lots of volunteers to run the Armed Forces Day special events station on 18 May and reservations for Field Day already made at Lunga Reservoir on the Quantico Marine Base. One of these years, we may even have a Marine member to join us!

As an unusual aside, some of us recently ordered very nice new embroidered callsign hats. The service we got from the little outfit that did them for us was spectacular. We don't endorse any commercial venture, but we can say that we were treated very well by Merlin's Custom Embroidery in Virginia Beach. The quality of work was superb and the courtesy remarkable. You can get more information by calling Linda Hoover at (804) 463-4460.

Spike, K9MX

MARS Saves Money

The Army's Military Affiliate Radio System (MARS) is saving soldiers and their families an estimated \$5.2 million a year for telegrams and long distance telephone calls they would otherwise make, explains Robert Sutton, chief of Army MARS at Fort Huachuca, Arizona. Sutton claims that the Army, too, is reaping big savings. He estimates this sum is about \$31.5 million a year.

"This figure consists of personnel and equipment costs the Army would have to pay if these services were not being donated by volunteer radio operators," he says. These projections were made before the onset of the Middle East crisis and probably now range considerably higher, Sutton added.

MARS consists of more than 233 military and 3,800 civilian high frequency radio stations around the world.

(From Signal 2/91 Official Publication of AFCEA)

[Editor's Note: While a large percentage of MARS members are licensed Amateur Radio operators, the operations on MARS are conducted **outside of** Amateur Bands and the restrictions regarding "business use" or competition with other communications services is not a factor. Amateurs operating on Amateur frequencies must still be careful of the type of message traffic they handle.]

Sterling Park Amateur Radio Club

Meetings: Third Monday of the month except December, July and August

At Sterling Community Center Annex, Church Road (Rt. 625)

near Route 28, Sterling, Virginia

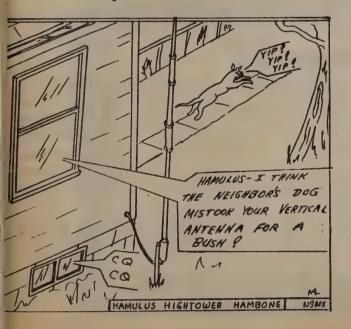
Box 599, Sterling, VA 22170

Information: Dick Maylott, W4LMJ (703) 430-3842 or Joe D'Angelo, WB2SAI (703) 444-1252

SPARC member have been highly active on the air the past few months. The heavy contest season found many members participating in the ARRL contests for which we now support club entry, the January VHF sweepstakes, and the DX CW and Phone contests. Of course, in mid-March activity was especially heavy in the SPARC-sponsored Virginia State QSO Party. Lots of high QSO numbers were reported during the weekend's activity, so it will be interesting to see what the results are when the logs are in. By the time you read this, all logs should be in so, if yours isn't, send it to N4UTY immediately.

Mailing:

The SPARC-Gap is back in regular production, thanks to Evan Mann - KM4SK. Although a bit leaner than the old version, it is very professional in its layout and presentation. Many thanks to Art Nevins - WA4NTP for his tremendous job of producing the newsletter for the past 12 years. Since yours Truly is now responsible for the mailing list, if you're not getting your newsletter, or are not a member and would like a sample copy, give us a call or drop me a note.



The past two meetings were so interesting that SPARC closed up the "Annex both months. (We appreciate the staff's assistance and forbearance.) In February, Red Free -W3FTG led a foursome of presenters of ham radio software demonstrations. Bill - NK5I started off with his own logging program that incorporated pre-programmed code messages. Steve - WA4ZAJ followed with his impressive "Personal Log Book" that he is readying for Dave - WB4AKC commercial distribution. demonstrated two AMSAT satellite tracking Red demonstrated the programs. Finally, "CT" popular LOGic and K1EA programs.

Do you enjoy the challenge of hidden transmitter hunt? How would you like to try it 50 years after the fact? That was the problem faced by Joe Kolesar - KA3WYM in trying to piece together the radio report related to Amelia Earhart's disappearance. Reports from her HF transmitters came in from all over the world. Sorting out the fact and fiction and accounting for HF propagation conditions and poor RDF technology made for an unusual and interesting March meeting. His work was featured in a segment on NBC's Unsolved Mysteries.

At our meeting on May 20, Bernie Keiser - WD40 will be the guest speaker. His topic will be ATV.

Usually this column can only report on what has happened, but until the end of April you can take in an exhibit of Amateur Radio at the Reston Library on Bowman Drive. Chris-WA1ZXX spearheaded the club effort to set it up for the month.

Finally, Field Day will soon be upon us. Bill, KC4ATU will again be heading up the club's efforts. As he would say, we can use all the help we can get, so if you can contribute either time or equipment, he would be anxious to hear from you.

Dick - W4LMJ

Southern Patuxent Amateur Radio Club

Meetings:

Second Wednesday of each month, Southern Community Center, Lusby, Maryland

(Serves St. Mary's, Calvert, and Charles Counties)

Mailing:

1445 Parran Road, St. Leonard, MD 20685 Information: Dwayne Kincaid, WD8OYG (301) 586-2177

Southern Patuxent Amateur Radio Club is the newest member of the Foundation for Amateur Radio. Organized in June, 1989, it now has 93 members and is actively involved in Training classes and VE Examinations. The club serves the area of St. Mary's. Calvert and Charles Counties.

President:

Dwayne Kincaid, WD8OYG

Vice Pres:

Robert Smith, N3IFL

Secretary: Treasurer:

Ted Savoy, N3HXN Jav McClain. N3HUH

FAR Trustee: Dwavne Kincaid, WD8OYG

Training classes for General, Advanced, and Extra theory will be starting May 29 at the Southern Community Center. For more information and pre-registration, Contact Dwayne Kincaid, WD8OYG (301) 586-2177.

May 8 - VE Examinations are scheduled at Lusby, MD (W5YI VEC). Pre-registration is requested.

Coming Events

August 25 - Southern Patuxent Hamfest, Upper Marlboro, MD.

Dwavne - WD8OYG

	Auto-call	
	Gift Certificate	
One	year subscription to Auto-Call	
From		-
То	CALL	
ADDRESS:		_
CITY	STATE ZIP	_

Antietam Radio Association

Meetings: 1st and 3rd Tuesdays of each month at 8:00 p.m. at the

Civil Defense Center, Washington County Courthouse

Hagerstown, Maryland

Nets: Tuesday: 7:00 p.m. 146.940/340 MHz FM

Wednesday: 7:00 p.m. 447.975/442.975 MHz FM

Thursday: 7:00 p.m. 147.090/690 MHz FM

Mailing: Antietam Radio Association, P.O. Box 52, Hagerston, MD 21741

KUDOS – and a big pat on the back to the Hagerstown area VEs, and to VEs everywhere. These guys and gals do a great job for the Amateur community, often without the acknowledgement they deserve. They make upgrading a pleasant experience, and the job they're doing is appreciated.

CLUB NEWS: Charlie Anderson - NF3X has volunteered to assist Barry Schmidt - N3ECM in co-ordinating and planning the ARA club activities this year. Charlie also does a great job with RACES and ARES. Thanks, Charlie. I'm certain that Barry appreciates the muchneeded help.

April brings the first public service activity of the year for the Antietam Radio Association. Dave Bender - W3JFQ is organizing an exhibition of Amateur Radio for St. Andrews School

of Waynesboro, Pennsylvania on April 6th in response to their Hobby Appreciation Day. It is planned to demonstrate HF, VHF, UHF, and Packet.

MDC QSO Party: Next month's column will be written by Page Pyne - WA3EOP and will concern rule change incorporated into the up'n coming MDC QSO Party.

Grand Cayman Island: Al Brown - WA3FYZ operated a station out of the Cayman Islands under the call ZF2LY in March. Contacts were made with club members W3BRZ, WA4IBY, KA3SDM, KD3TY, W3FZT, WA3EOP and WE3GEJ, as well as with many other Hams. Some club members contacted Al on more than one band. Page Pyne - WA3EOP functioned as QSL Manager again, as he did last year.

Don Marsden - KD3TY

Don't Leave your Heirs in a Shack Lurch Rev. Jim McChesney, WA@PFV

Married or single, the wise ham of every age could help his/her family and/or heirs in the event of his/her demise by having an inventory of the ham shack and instructions for disposal of the equipment. Especially where there is not another ham in the family, the death of an Amateur Radio operator can leave the widow(er) and/or heirs in a fog of grief about what to do with all that gear.

Make up an inventory and then update it on a regular basis. Leave your family or friends some clear instructions. You might want to help the ARRL Foundation or the Courage Handi-Hams or some other ham groups. I've asked a friend to sell my gear, with some of the proceeds to go to my radio club and the rest to my wife. To be certain your wishes for the disposal of your station and related equipment are respected and followed, those instructions should be written into your will and a letter of instruction form should be filled out and attached to it.

Don't put it off. The time to prepare your instructions is while you are still hale and hearty.

(Edited from article in Badger State Smoke Signals via ARNS Bulletin 4/91)

Laurel Amateur Radio Club

A Volunteer Examiner Coordinator

Meetings: 4th Wednesday of each month (except November & December)

8:00 p.m. at Capitol College on Springfield Road, Laurel.

Social: 2nd Wednesday of each month except December. (Call for directions.)
Nets: 1st & 3rd & 5th Wednesday of each month, 8:30 p.m. on 147.54 simplex.

Mail: P.O. Box 3039, Laurel, MD 20709-0039

Exams: 3rd Saturday of each month, 10:00 a.m. at Maryland Radio Center.

Information: Bill - KD3EC (301) 776-4083 or Jim - WI3N (301) 725-6829

The Laurel Amateur Radio Club is active in the Laurel area, which we think generally includes most of Northern PG County, as well as the surrounding area in Howard, Montgomery, and Anne Arundel Counties. All Amateurs in "our neighborhood" are welcome to participate in LARC activities.

At the March 27 regular meeting of the LARC, it was our pleasure to host as our featured speaker Dr. Ron Parise - WA4SIR, the payload specialist on the December shuttle flight.

Word was sent to local clubs and put on packet bulletin boards. Eighty people showed up, including club members, spouses, children, and visitors.

Ron brought slides he had taken of the earth and the interior of the shuttle. He also brought a 16mm film provided by NASA of life aboard the shuttle. Weightlessness provides many opportunities for sight gags.

Our meeting was the first speaking engagement he had that was directed specifically towards hams and he successfully tailored his presentation for us. After Ron explained about the way the antenna worked and the mechanics of the flight path, it became more clear why it was often difficult for U.S. hams to work him. His slides of various places on earth were both breathtaking and interesting as he described underwater waves 150 miles apart or areas of the South American rain forest which were being systematically cut down. Following the formal presentation, Ron graciously stayed for coffee and more questions.

The LARC is now gearing up to provide communications for the Montpelier Festival and the Main Street Festival to be held May 5 and May 18, respectively. We will have our booth set up at both events to demonstrate Amateur Radio, and we will also provide a base station with a net control and "shadows" for key event people.

Jim - WI3N

Fast Lightning!

The Lightning rods and surge arrester many homeowners rely on to protect their property from damages caused by lightning strikes many not be effective, according to lightning researcher Dr. E. Philip Krider of the University of Arizona in Tucson.

In a paper presented at the annual meeting of the American Association for the Advancement of Science, Dr. Krider said that his team has found that the current in a lightning bolt can surge up to 400,000 amps in a millionth of a second - about 20 times faster than had previously been thought possible. This means that current technology lightning rods and surge arresters are probably not fast enough to protect against lightning damage.

Dr. Krider is part of a team researching the causes and effects of "triggered lightning," that is, lightning triggered by the passage of a rocket or aircraft through otherwise lightning-free clouds.

(Taken from article by Fulton Amateur Radio Club, Fulton, NY and reprinted in WorldRadio, January 1991)

Mt. Vernon Amateur Radio Club (MVARC)

Meetings: Second Thursday of Each Month, 7:30 p.m.

Mt. Vernon Governmental Center, 2511 Parkers Ln., Alexandria

WD4PDP/R 146.055 input 146.655 output

Nets: Every Tuesday at 8:00 pm (0100 UTC Wednesday's)

Starts on 2-meter then moves to 10-meter on 28.405

Information: Chris Morrow, W4WYL (703)765-5964
Training Classes: John Forrest, WZ4A (703) 971-3905

Mailing Address: c/o Chris Morrow, W4WYL, 7408 Recard Ln., Alexandria, VA 22307

March brought a tour of the U.S. Coast Guard communications station as our program. Matt KI6GA, Glenn W4OCC, and Larry K7SV split us into groups then guided each group through three locations--starting with a video tape about the Omega system, then on to the MARS station, then finally to a Coast Guard communications center. Each stop was accompanied by great explanations (which had to be given three times by these patient guys). We really appreciate your efforts...THANK YOU!

Repeater:

We had several WELCOME VISITORS even though the meeting was at an "odd" location: Scott McNutt N3ADP, Caroline Cronan (Jerry N4JWG's XYL), Joan Bilger (Glenn W4OCC's XYL), Jeanette Morrow (Chris W4WYL's XYL), Frances Cowhig (Dave WA1LBP's daughter), Victor, Elizabeth and David Espinosa, Richard Cramer N4YDD, George Riscili WA4NKQ, James McKinley WD4OJY and Barbara Trombino (Joe W2KJ's XYL). WOW, what a wonderful group! Thank you one and all for joining us. The club WELCOMES a new member: Gary Lanza who is working on getting his license.

MANY club members were on hand March 23 to help at the Virginia Special Olympics. The events were scattered all over Northern Virginia at several high schools, George Mason, Bowl America and the Capital Gymnastics Center. Net control was at the Red Cross.

"THANK YOU FOR HELPING" is warmly given to all the hams who participated. From our club, Tom N4BV, Steve WB4EEA, Mike KE4ER, Frank N4GUS, Fred KN4JS, Dick AB4JX, Marci KM4VM, Rick, KF4LM, Bob N4SCK, Mary N4TCI, Luis KC4NUE and John KI4HK. I hope I didn't leave anyone out...if I did, it's only because I never heard you on the net!

Update on the efforts of Keith KC4TZJ, Luke KC4UJS and Dave WA1LBP at Springfield Estates Elem. School--they have started a ham club which meets Friday evenings. The idea is for both parents and children to be able to participate. The early indications are that this is a very popular concept. The turnout on the first day was impressive and they had 36 parents and students signed up by the end of their first Novice class meeting.

May's meeting will have new club officers and as our program, we will begin recognizing members who have contributed a great deal of themselves to the club and amateur radio. It will be the start of an ongoing project to honor all of the "do-ers" in the club. Don't forget that Field Day is rapidly approaching! I look forward to seeing many familiar and new faces on May 9, 7:30 p.m.

Marci, KM4VM

FAR Speakers Bureau

The Foundation maintains a Speakers Listing for the local area as a resource for member club's programs. Herb Ley, N3CDR has taken on the task of expanding and updating this listing. He needs your input. He also needs your requests.

If you feel qualified to speak on any appropriate subject, contact Herb.

If you would like to find a good speaker for your club, contact Herb.

Herb Ley, N3CDR P.O. Box 2047 Rockville, MD 20852

Alexandria Radio Club

ARES Net:

Thursday at 9:00 p.m. on the 147.315 Repeater

10 Meter Net: Repeaters:

Meets on Thursday nights at 9:30 p.m. on 28.350 MHz USB Repeaters on 147.315/915, 444.6/449.6, 6 Meters and 220 MHz

Meetings: The second Friday of each month at the Red Cross Chapter House, 401 Duke Street, Alexandria, VA

1991 is off to a busy start (we're a little behind on our Auto Call submissions). With the assistance of Arlington, Mt. Vernon and other Hams we provided support for the George Washington Birthday parade and the St. Patrick's Day parade in Alexandria.

We are currently preparing to do a demonstration station as part of the City of Alexandria Emergency Medical Services display at Landmark Center on May 18. We hope to set up 2 meter voice and packet, and some type of HF (probably 10 meters). Stop by and operate if you get a chance! (Contact Rich. KA4GFY, 931-2917 to sign up, or just drop by.)



Our plans for the next few meetings are:

April 12 - Jim Stone, W4YUE will speak on radio navigation aids used in private and commercial aircraft. Jim is a Certified Flight instructor for Private Pilots, and Instrument Rated Private Pilots.

May 10 - No club meeting. CPR class for club members at the Alexandria Fire Department training center. RSVP is required. Contact Chuck, N4HCP (435-8038).

June 14 - No club meeting. Alexandria Water Front Festival. Meet on the water front for food, fun, music, and fireworks.

June 18 - TUESDAY - Informal cookout and Field Day planning session. A bring-your-own cookout at one of the club members homes. Contact Chuck, N4HCP (435-8038) for location and other details.

July 12 - Tentative program is the new 800 Mhz system in use by the city of Alexandria.

See you at the club events and the Hamfests!

Chuck, N4HCP

Braille Edition Extra Class License Manual

The Northern Nevada Braile Transcribers, Inc., is offering a braille edition of the ARRL Extra Class License Manual For The Radio Amateur, Third Edition. The book is done in literary braille. The manuscript is 7 volumes of varying length, primarily corresponding to the chapters. They request that all materials either be passed on or returned to them for recycling to others.

The organization is a small, volunteer group that is making the braille manuscripts available without charge to individuals. Donations of any amount are greatly appreciated.

For further information contact Lois Baskerville, Advocate/Instructor, 1015 Oxford Avenue, Sparks, Nevada 89431-3037 Phone (702) 358-2456 Voice/TDD

Stafford Amateur Radio Association

Meetings: Weekly, 0730 a.m. every Saturday morning. at the

"Nothin Fancy" Cafe on Route 1. All meetings are informal. N4SMP/R 145.27 out 144.67 in. Autopatch for members.

Repeater: Mailing: c/o George Gautney - N4SMP, 9 Skyview Ct., Stafford, VA 22554-5232

Information: Dick Kirby - W4GFB (703) 720-0406 or George Gautney - N4SMP (703) 659-5720

Packet: 145.07. W4GFB-2

SARA's most recent license examination session resulted in 6 upgrades - two new No code technicians and four new technicians with code. None of the nine examinees left the session without credit for at least one element toward an upgrade. The six new technicians are Thomas Barrett, Joseph McGlade, Tom Harmon, William Hartman -KC4WQC, and James Catalano - KC4SZT, an eleven-year old member of the middle school's radio club.

Bob Lewis, AA4PB, hasn't been seen much at the Saturday breakfasts these past several weeks, because he's been busy supervising the building of a new church. He remains generous

with his time, though, and helped with the running of the March test session.

SARA's Saturday breakfast continues to be a time when hams in the Stafford area get together to tell tall tales about the rare one that got away and to argue about issues ranging from the mundane to critically important (like, when's that S2 going to be on). If you have the time, join us. Breakfast is good and it's inexpensive. We meet at about 7:30 (but you can come as late as about 8:30 and find some of us there) at the "Nothin' Fancy" on the Jefferson Highway, Rt 1, just South of the Stafford Courthouse.

Spike, K9MX

Ham Fellowship K4LMB

I thought I'd like to join a club where I could have some fun; I heard about your local group and thought I'd found the one. I hunted up your meeting place, but as I waited there I doubted you could be the hams I'd talked to on the air.

I stood there just inside the door and tried to catch an eye, But you dashed past to old-time friends and simply passed me by. It was a real fine meeting, but it lasted fairly long, And when the gavel sounded, everyone was up and gone.

I went home feeling lonely - when I'd hoped for fellowship; I didn't meet a single soul who seemed to care a whit. I think I'll try again next month, and if I do attend, Won't someone introduce himself? I'd like to be your friend.

Auto-Call 2/73

Fauquier Amateur Radio Club

Meetings:

Second Tuesday of each month, 7:30 p.m. Shadow Lawn Center, Warrenton, Virginia

Repeaters:

147.165 Voice (NZ4N/R), 145.070 Packet Digi (K4LLQ-5)

RBBS: Information: Mail Address: 145.090 W4SQQ Memorial BBS - N4YXW-1 Donald Maziarz, WY2V (703) 347-5745

Route 3, Box 139-C, Warrenton, Virginia 22186

The focus of the April meeting will be presentation on SAREX. This event is most appropriate with the Shuttle launch scheduled early in April, which will include a SAREX capability. A short presentation on a personal project will follow the SAREX portion of the program.

The popularity of Amateur Radio in the local area has dramatically increased since the inception of the no code license. A class given by Nelson Funkhouser - N4VJW has many new aspirants for the hobby. The class completed the Novice training and participated in a club sponsored W5YI VEC testing session on April 1 (no fooling) with everyone passing the Novice

written examination. The VE session also saw several Amateurs upgrade their class of license. One new-comer to the service came to the session and passed exams for five element. Nelson's class will continue by addressing the information required to pass the Technician class exam. Congratulations and good luck to all.

The May meeting will be anchored by a presentation from Harry Dannals - W2HD. Mr. Dannals is the president of QCWA and a past president of the ARRL. Harry's topic will be: Amateur Radio - Where is it going? See you there.

Don Maziarz - WY2V

Code to the Rescue Chuck Hite, W3SOG

There are as many different opinions as there are hams when the subject of the new codeless license comes up for discussion. I happen to believe that code is handy to know – even if you prefer Sandscrit. I experienced one incident that illustrates how unexpectedly code may be important.

I was returning home one bitterly cold New Years morning about three a.m. after playing for a dance. When I was within a mile and a half from my exit off I-270 interstate highway I noticed a car stopped at the side of the road with its tail lights blinking. There seemed to be nothing unusual, no one was outside the car and it didn't appear to be stuck in the snow, so after slowing down a bit to survey the scene I started to pass the vehicle. I was anxious to get home. However, as I passed the car I suddenly realized that I had read an SOS in those blinking tail lights! I stopped and backed up and got out of my car expecting real trouble. Both doors opened and two figures slowly get out. There were two men in the car and they were in pretty bad shape from the cold. They had been travelling from Richmond, Virginia and had stopped and turned off their engine to answer a call of nature. When they tried to restart the engine, the bendix spring on their starter had failed and the starter would not engage. The driver had flashed his SOS on the brake pedal, hoping someone would recognize it.

I got them both in my car, gave them each a warm blanket I carried for my own protection in emergency, turned up the heater and drove 20 miles to Frederick, Maryland to the nearest and only service station open all night. There was no heroism in my act, but their gratitude for my ability to read their distress signal in poorly sent Morse code more than repaid the small effort it had taken for me to learn CW when preparing for my Amateur license. Enough for justifying learning Morse code. I'm sure many readers will have their own stories to tell. Code is still a very useful tool.

(Drastically edited to fit available space.)

Anne Arundel Radio Club

Meetings: First and Third Thursdays at 8:00 p.m.

Davidsonville Family Recreation Center, Queen Anne Bridge &

Wayson Roads off Md. Rt 214 near Annapolis

On-the-Air Thursdays when there is no club meeting, 2030 Local on 147.705/105

Tuesdays at 2030 Local time on 28.410

The Chesapeake Bay Weather & Traffic Net on 147.705/105 at 1100 and 1500

every weekend day and public holiday from April 1 to November 15. Maryland Slow Net (MSN) every evening at 1930 on 3.7170 MHz

Address: Information: P.O. Box 308, Davidsonville, MD 21035 Margaret (Holly) Bevan, (301) 923-0229

April proved to be an exceptionally busy month for AARC. Three events provided opportunities for public service communications: The Marlborough Hunt Club Races at Roedown on April 7, the March of Dimes Walkathon in Annapolis on April 14, and the YWCA 10K Run in Annapolis on April 20.

AT the March 21 Club meeting, Tom Nolan - WA3YZN presented a very interesting program entitled "Saudi Arabia - A Culture of Differences." His short talk, followed by a videotape he made in Riyadh, pointed out the extreme differences between our country and Saudi Arabia. Tom spent 2½ years there as a civilian supervising the operation of their Loran-C Radio Navigation system.

At the clubhouse on March 9, Oscar Ramsey - NV3G, Bob Israel - WC3I, and Jim Bruce - NV3V administered 17 exams to 11 persons. Eleven passed and eight upgraded. Dean Alley - NS3V, Nancy Alley - NT3Z, John Kohl - K04A, Gordon Davids - WJ3K,

and Holly Bevan - N3BMB were on hand to assist. The next scheduled exam date at the AARC Clubhouse is May 11.

The Chesapeake Weather & Traffic Nets, sponsored by AARC, are held from the first weekend in April through November 15th. The nets are called at 1100 and 1500 hours each weekend day and holiday. "On-the-spot" weather observations reported to the nets by boaters in various sections of the Bay are monitored and used by the U.S. Weather Service in its marine weather forecasting.

Wallace Bailey - N3IYC upgraded to General. Wallace was in this year's Novice class. He was one of four students who pulled out and tested before the end of the class. Maureen Mulrooney (awaiting call) was another. She is now a Technician. New calls: Ann Summerfelt changed from N3ILE to WJ3T and Bob Williams received his Novice call N3IYF.

Holly - N3BMB

Foundation Meetings

The Foundation for Amateur Radio meets at 8:00 p.m. on the second Wednesday of each month.

Visitors are always welcome

Membership is open to any Amateur Radio organization in the local area.

Phone (301) 725-5822 for information

The next meeting will be on May 8 in Alexandria, Virginia Lee Center School Building at 1108 Jefferson Street Talk-in on 146.55

G AND G ELECTRONICS

OF MARYLAND

8524 DAKOTA DRIVE, GAITHERSBURG, MD.

WANTED FOR CASH!

USED Ham Gear, Test Equip. and Junque Boxes

,		
1	G&G ELECTRONICS OF MARYLAND JEFFREY GOLDMAN	548
	8524 DAKOTA DRIVE (301) 258-7373 GAITHERSBURG, MD 20877	March 1 19 87 65-7198/2550
	PAY TO THE John Q. Amateur, WA4XYZ	\$ 500.00
	Five Hundred and 00/100	DOLLARS
	CHEVY CHASE SAVINGS AND LOAN, INC. CHEVY CHASE, MARYLAND 20815	
	OR Used Equipment	==== SAMPLE ====
	:255071981:	0548

We've got one for you!

HOURS: MON & TUES 11 AM TO 9 PM
WED 11 TO 5 & BY APPOINTMENT

258.7373

Noncommercial advertising of Amateur associated equipment is available to subscribers of AUTO-/CALL at a rate of 3¢ per word -- with a \$1 minimum. Commercial vendors and nonsubscriber rate is 17¢ per word -- with a \$5.50 (1 inch) minimum. Special headings or special spacing (e.g. one item per line) may be used but such ads will be charged at the column inch rate.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone and all ads must be pre-paid. Estate sales for Widows Assistance handled by a FAR club will be published without cost. Since no effort is made to investigate advertisers, no warranty can be implied.

Copy must be received by the 5th of the month preceding publication.

DONATION TO CLUB or MAKE ANY OFFER Selling Home and Tower Must Go. Fifty foot windmill tower with Mosley TA33-40K triband beam and 40 meter dipole; HAM-M Rotator. George Willingmyre - K3SZZ (301) 421-1752, Silver Spring, Maryland (05)

WANTED: Old, odd, unique and foreign Bugs. Smiley - WB4EDB, P.O. Box 5150, Fredericksburg, Virginia 22403 or phone (703) 373-0966 collect. (05)

WANTED IN ANY CONDITION:

COLLINS RECEIVERS 51J4 and 75A Series COLLINS 32V Transmitters COLLINS 30K Transmitters Howard Mills - W3HM, RT#3, Box 712, Harpers Ferry, WV 25425. Telephone: (work) 202-647-2428 (home after 7 p.m.) 304-876-6483. (08)

Need antenna or tower work done? Call L. Chertok - W3GRF. (301) 297-4888

LOOKING FOR A GOOD HOME FOR

Some rather antique microphones and some ancillary equipment from a neighbor whose father was a ham many years ago. Two complete year issues of QST for the years 1925 and 1926. Hard-bound cover. In good condition although the passing of time has rendered them in less than mint condition. I have no storage space to spare, nor the inclination to treasure them for posterity. If you would like to have them at no charge, contact Frank Youell - WA3WAN at (301) 643-3249, 613 Victoria Drive, Stevensville, MD 21666. (FARO5)

WANTED: COLLINS 310, 32W1 Exciters, HRO Receiver, VT25 Tubes. Joe - N4WQC Box 19302, Alexandria, VA 22320. Call (703) 683-2955 (05)

WANTED In any Condition:
ACROSOUND UL II power amplifier
Tube-type high-fidelity preamplifier
UTC Linear Standard transformers
Western Electric or Altec 755 or 756
speaker. Howard Sams Audio Amplifier
Volumes AA1-9.
Mark van Roojen, 127 Moore Street,
Princeton, NJ 08540 (609) 921-8171 (05)

NORM'S ROTOR SERVICE

Rebuilt Rotors, Parts & Service Call Norm Jeweler - K3LYW 5263 Agro Drive Frederick, MD 21701 (301) 874-5885

THE MARYLAND FM ASSOCIATION, INC. PROUDLY PRESENTS ITS ANNUAL

MEMORIAL DAY HAMFEST ON SUNDAY MAY 26, 1991

AT THE HOWARD COUNTY FAIRGROUNDS RT. #144, WEST FRIENDSHIP, MARYLAND

TIME: 8 a.m. until 3 p.m. -- premises MUST be cleared by 5 p.m.

TALK-IN on WA3DZD/Repeater (146.16/146.76, 223.16/224.76, and 449.0/444.0)

Plenty of good food and drink will be available.

COMMERCIAL DISPLAYS

AMPLE PARKING

DONATION: \$4

Tailgating: \$3
Table rentals (inside):

Paid in advance -- \$15
At the Hamfest -- \$20

(if available)

Only PAID table reservations accepted. If you haven't paid, you don't have reservations.

For reservations and information, write to:
Melvin Seyle (WA3KZR)

15809 Pointer Ridge Drive Bowie, MD 20716 301–249–6147 Make checks payable to MFMA, Inc.

All proceeds will be used for improvements to the Club's WA3DZD repeater system.

Commercial vendors must have proper tax/license certificates available.

All items offered for sale must be Amateur Radio related.

FOR SALE: HAM RADIO HEAVEN IN POTOMAC, Maryland. 60 foot tower, KLM KT-34A 4-element tribander, 11-element 2-meter beam. Excellent radio location, 285 countries worked. 2600 square foot colonial, 4 bedrooms upstairs, LR, DR, Family Room, Den/Ham Shack, 2½ baths, laundry next to large eat-in kitchen, half basement. Hardwood floors in excellent condition. Short walk to best Montgomery County schools. Three minutes to I-270. Asking \$315,000. Norman Brickman - W3FYH (301) 983-9321 (Home) or (301) 240-3255 (Work). (05)

Tell our advertisers you see their ads and we appreciate their support. Advertise in Auto-Call



TIRED OF RESTRICTIVE COVENANTS?
Want some trees for antennas? Very nice rambler, spacious corner lot, ample shade trees, inside the beltway, walk to metro and schools. Large den/office/HAM SHACK. NO COVENANTS. Fairfax County building codes. Asking \$169,500. Call Joe Peters - WB4WZZ for more details (703) 241-0078

FOR SALE: Drake L-4B linear amplifier, 15-80 meters. Excellent condition \$600 Charlie Wirth - WB3DDF (301) 384-0198 Silver Spring, MD (05)

WANTED: Mint Drake TR-4CW with RIT, and other TR-3 or TR-4 series with power supplies and speakers, mics, etc. Dick - K3DML (301) 340-8251, Rockville, Maryland (05)

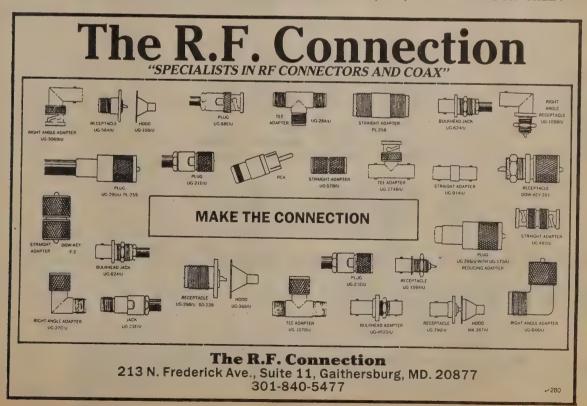
"RADIO INSTALLATIONS"

Clean - Neat - Professional

If you want it done right

Call us.

Herm - K2LEQ/3 (301) 952 1414 FOR SALE:



GAITHERSBURG

GAITHERSBURG-1991-SEPTEMBER 8, 1991-GAITHERSBURG 1991 SEPTEMBER 8, 1991-GAITHERSBURG-1991-SEPTEMBER 8, 1991



An ARRL Approved Hamfest

Montgomery County Agricultural Center

(FAIRGROUNDS)

For more information and table reservations write or call

GAITHERSBURG '91
FOUNDATION FOR AMATEUR RADIO
P.O. Box 1068
LAUREL, MD 20725

Telephone 301-776-3571

GAITHERSBURG '91...GAITHERSBURG '91...GAITHERSBURG '91 SEPTEMBER 8, 1991...SEPTEMBER 8, 1991...SEPTEMBER 8, 1991

Host Hotel

Gaithersburg Holiday Inn
2 Montgomery Avenue
(Across form the Fairgrounds)
Gaithersburg, MD 20879

301-948-8900 Call for special hamfest rates

72 Holiday Inn

Be sure to mention the Gaithersburg Hamfest for special rates

The Foundation For Amateur Radio



Washington DC

WORLDRADIO, Amateur Radio's monthly newspaper can be delivered to your doorstep for only \$14 per year (\$24 overseas). Get the latest on how your fellow amateurs use their hobby to help others. Regular features are Contest and Hamfest announcements, Aerials, Amateur Satellites, Continuous Wave, Digital Bus, DX World, Search & Search & Rescue Communications, FCC Highlights, Mobile, New Products, Propagation, QCWA, QRP, Station Appearance, Traffic, VE Exams, 10-10 International News. Send your subscription to WORLDRADIO, 201 Lathrop Way, Ste. D, Sacramento, CA 95815. (Swp)

REMEMBER the FAMOUS BRATS Maryland HAMFEST and COMPUTERFEST, Sunday, July 28, 1991
at the Timonium Fairgrounds
Timonium (Baltimore) Maryland
(301) 583-9147 or write The BRATS
P.O. Box 5915; Baltimore, MD 21208

** MOVING SALE ** W4PBC QSYs to Florida accumulation of good stuff, 13-year

including:
• Heath SB-200 amplifier, in excellent condition. Driven only on weekends \$225 by cw operator

Desk, steel office type, 60" x 30"
4 drawers & file drawer
16 mm Bell & Howell film projector.

from departed kids each \$5 Roll-top desk, antique green, with Roll-top desk, antique green, wit two top units: one for ham radio,

vet uncovered.

Call for date of private garage Springfield, Virginia. Phone Jeff (703) 644-6584 (msgs), (703) 451-2818

WANTED: ICOM IC-3AT 220 MHz Handheld in Excellent/good condition. Contact Jay Madigan - KC4UBM in the evenings at (703) 444-2633, Great Falls. Virginia (05)

WANTED: HAM EQUIPMENT AND OTHER PROPERTY. The Radio Club of Junior High School 22 NYC, Inc. is a nonprofit High School 22 NYC, Inc. is a nonprofit organization, granted 501(C)(3) status by the IRS and incorporated with the goal of using the theme of ham radio to further and enhance the education of young people nationwide. Your property donation or financial support would be greatly appreciated and acknowledged with a receipt for your tax deductible contribution. As 1991 begins, please look over whatever unwanted equipment you may have and call us. We will pick up or arrange shipping. You will receive the tax deduction, but most up or arrange shipping. You will receive the tax deduction, but most important, the privilege of knowing that your gift really made a difference in the education and upbringing of a child. Meet us on the WB2JKJ CLASSROOM NET, 1200 UTC on 7.238 MHz. We hope to see you at Dayton Hamvention. Write us at: THE RC OF JHS 22 NYC, INC, P.O. Box 1052, New York, NY 10002. 'Round the clock HOTLINES: Voice (516) 674-4072, FAX (516) 674-9600 (02 Pd)

Are you interested in 6-meter (50-54 MHz Activities? Join the Metropolitan Communications Network Radio Club, Nets: Saturday 7 p.m. on the club FM Repeater 53.250 out/52.250 in; Sunday 9 a.m. on 50.400 and 7 p.m. on upper side band 51.25. If you want more information call Bob, KI4M at (703) 533-0650 or see Auto-Call Index for club news column.





COMPUTER CORNER

FOR SALE: VIC-20 with AIR-1 Commodore C-64, 1541 Disk Drive	\$125 \$150
Commodore Dot Matrix Printer	\$125
And the ODD Couple. QRP HW-9, WARC bands, and PSA-9	\$275
Hallicrafter HT-33B KW Linear Call Dick Hayman - K3DML, Rockville	e, MD
(301) 340-8251, 15 Arlive Co Rockville, MD 20854	(05)

WANTED:

A CE-701L or CE-702L Backlight and a CE-700P Printer for a Sharp PC-7000 personal computer. Phone or write to Jack Weaver - WB4SXJ, 1440 Kent Circle, Winchester, VA 22601 (703) 662-0587(05)

WANTED: EP44 Brother Typewriter or Radio Shack 100 laptop or TRS 80 or NEC 8201 with RS232 (ASCII) ports or anything similar for packet. What do you have? Gerald - KB4QGJ (703) 370-1880 (05)

FOR SALE: TOSHIBA T1100 Plus portable computer, two 3" drives, carrying case and Thompson 2140 13" color \$750 monitor monitor ... 5750 Jim Devilbiss - WA3FUJ (301) 662-5784, Frederick, MD (06)

FOR SALE: DUPLEXER, VHF, Sinclair, hybrid ring, Model 202G, 4 cavities, very good condition. Minimum frequency separation 0.03% (450 kHz @ 150 MHz). \$200 or Includes field tuning guide. best offer. Ed Morthimer (703) 425-6997, Burke, VA WA3TOL

FOR SALE: CUSHCRAFT 32-19 2-M Boomer \$70 424B UHF Boomer \$50 DAIWA MR-750E Round display HD Rotor\$150 WANTED: Heights Aluminum tower, Telewave 44AP Wattmeter, EMOTO 1200 FXX rotor. Mike Baker - W8CM, 306 Woodberry Lane, Lynchburg, VA 24502 (804) 239-5152 (05)

Attention Amateur Radio Newsletter Editor. AMATEUR RADIO NEWS SERVICE is an organization of publisher and editors of Amateur Radio newletter and members engaged in public relations. For information, write to Lee Knirko information, write to Lee Knir W9MOL, 833 Park Plaine, Park Ridge, Illinois 60068

SLIDE RULES WANTED

Bob Hill, NK3W 200 Agnes Lane, Linthicum, MD (301) 789-4772 21090-1702

CALL JWO SERVICES

Save on: AMECO; ARRL; CALLBOOKS; G. WEST; TEXAS INSTRUMENTS calculators; code keys, oscillators etc.

New! ARRL NO-CODE STUDY GUIDE-Just Released! New! ARRL NO-CODE STUDY GUIDE—Just Released!
"Now You're Talking" Combines the Novice and No-Code Technician
Class license requirement. (List \$19) 1-9 \$17.35; 10-up \$16.20

New! ARRL FCC RULE BOOK-Just Released! Contains latest No-Code
FCC rule change. (List \$9) 1-9 \$8.25; 10-up \$7.70

New! Just Released! ARRL 1991-1992 REPEATER DIRECTORY
(List \$6) 1-9 \$5.50; 10-up \$5.15

Wide relection of study myddes for clubs and classes.

(List \$6) 1-9 \$5.50; 10-up \$5.15

Wide selection of study guides for clubs and classes —

In the quantities you need when you need them. All current materials for the new No-code Amateur License are in stock!

BIG SAVINGS ON CALLBOOKS AND HANDBOOKS; ANTENNA BOOK, ETC.!

1991 U.S. or INTERNATIONAL CALLBOOK

(Liet \$29.85 cm.) (Callbook)

(List \$29.95 ea.) Only \$27.25 ea; or Both for only \$25 ea.)
Ordering Information: 30c handling per order and actual
UPS costs. (Enclose amount for estimated shipping. Overpayments
will be immediately refunded with shipment.)

JWO SERVICES

5th Year of Excellent Service John W. Obradovich, W3IS

12 Hickory Place (717) 737-0850

Camp Hill, PA 07011 Mastercard/Visa

Daily to 10 p.m. and weekend afternoons

FOR SALE: Hard to find:
Complete Station . . . KENWOOD TS 430S
Transceiver - CW, AM Filters and FM
unit installed. AT 250 Automatic
Antenna Tuner. Matching PS 430 power
supply & SP 430 speaker. SWAN WM 1500
watt meter. Absolutely mint condition Used less than five hours. Manuals and
original cartons. Vert Mandelstamm W3ADS
(301) 933-0274 Silver Spring, MD (05)



AMATEUR RADIO CLASSIFIED Quality equipment Buy/Sell/Trade Publication Easiest to read. Published twice monthly.
Ads: 25¢/word. Subscriptions \$12/Year Ads: 25¢/word. Subscription, GA Samples free. POB 245-A, Jonesboro, GA (05) Zip 30237.





Skypoint Ham Center, Leesburg, VA

NUNNNNNN

Skypoint Ham Center 15 C Catoctin Circle 8E Leesburg, Va 22075 1-703-777-9188

Vintage Corner

Collins S/lines & KWM2/A
Hallicrafters HT-37
Johnson match box
Johnson Pacemaker
B & W 51SB ssb gen
B & W L-1000A amp
Gonset GSB-201
National NCX-3
Eldico S / Line
Lafayette HA-350
Hallicrafters HQ-170A
Collins 75A-4
Eldico S/ line
Hallicrafters Sky Buddy
Johnson Viking 11 & VFO

Many other pieces too numerous to list! Call store for more listings.

If you are in the market for good clean used rigs and shack accessories we can supply your needs!!

- * Large inventory of used ham gear available..up to date & vintage!
- * Professional service with modest rates and quick turnaround!
- * Well stocked inventory of new rigs, station accessories and antenna needs!
- * Collins equipment a specialty!
- * Estate liquidations and sales welcomed!
- * Customer satisfaction a priority!

MONTHLY FEATURE

DUAL BAND HT DRAWING CONTINUES!!!! MAY 91

OUR NEW STORE IS GIVING AWAY A FREE....ICOM IC-24AT ON FRI NIGHT MAY 10TH. JUST COME BY AND VISIT OUR NEW STORE...... NO PURCHASE REQUIRED..JUST DROP YOUR NAME IN THE BOX AND BROWSE ...TNX es 73's

STORE HOURS:

Tue-Thur..10 - 6
Fri..12 - 9
Sat. 10 - 6



ACCEPTED



Our store is located at 15 Catoctin Circle between Rt 7 & King Street. Location is at the Harco Bldg just north of the post office. Look for our antennas!

AUTO-CALL POLICY

PRODUCTION POLICY

Copy for Auto-Call will be accepted in any form - handwritten, typed, compatible computer disk or modem. All hard copy is retyped to preserve uniformity of style in the magazine. We use Word Perfect 5.1 word processing program, Hayes compatible modem (300 or 1200 baud) and can use either $3\frac{1}{2}$ " or $5\frac{1}{4}$ " MS-DOS diskettes.

In determining space requirements, figure about 600 words per page (50 lines at 12 words per line), including the space taken up by headings, photographs, etc. Either black-and-white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper and should be in proper page ratio. (Copy space is 7" wide by 9" high.) Copy can be reduced or enlarged as necessary.

Columns from Foundation member clubs are eagerly solicited and any items of general Amateur Radio interest are most welcome. The editor does reserve the right to edit or reject any portion of any copy submitted and to make minor changes to make copy fit available space.

SHACK SALES

Deadline for copy is the 5th of the month preceding the publication date. Shack Sales will NOT be accepted over the telephone. Full address must be provided for our reference but need not be published. Each ad must include the call sign or the full name of the advertiser. If the full address in not included in the ad, we prefer to include the city along with a telephone number so that readers will know whether a long-distance charge is involved. The entire telephone number - including city and state - is counted as only one word. We do not count postal zip codes. Otherwise, each word, abbreviation, model number or group of letter/numbers is counted as one word. Remittance must accompany each ad.

See next column for additional information on advertising. For further information, phone the Auto-Call editor at (703) 536-8469, McLean, VA.

ADVIDRATISTNE

SHAOKSALDS

Non-commercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at 3t per word - with a \$1.00 minimum. Commercial vendors and non-subscriber rate is 17t per word - with a \$5.50 minimum.

Special headings or special spacing may be used (e.g., one item per line) but such ads are charged at a column inch rate - \$1.00 per column inch for non-commercial ads, \$5.50 per inch for commercial vendors and nonsubscribers.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

DISPINATADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the Shack Sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

Display ads are charged according to size and duration of run as shown below. All advertising must be pre-paid for at least the current month.

Rajes per Issue

Page Colin	ch 1 Year	6 Times	3 Times	i i filimei
	18	3 75.00	\$90.00	\$100.00\$105.00
1/2	9	55.00	65.00	71.00 75.00
1/8	6	40.00	46.00	51.00 54.00
1/4	41/4	33.00	38.00	41.00 43.00
1/6	3	22.00	26.00	28.00 30.00
1/8	21/4	17.00	20.00	22.00 23.00
1/9	2	16.00	19.00	21.00 22.00
1/18		8.50	10.00	11.00 11.50
	Rass	i on camer	arready con	<u>, y</u>

Extra charges for halftoning photos and for in-house artwork or layout.

Copy must be received by the 5th of the month preceding publication date.
(e.g., Copy for August issue must be received by 5 July)

All Advertising Must be Pre-paid



proof of age. may request special dues rate of \$24 in the U.S. \$36 elsewhere in U.S. funds. Persons age 17 and younger may qualify for special rates, write for application. For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

VISA, MC, AMEX, Discover #_ Expires

The American Radio Relay League Newington, CT. 06111 225 Main St.

USA AUTOCALL

Atlantic Division Director Hugh Turnbull, W3ABC 6903 Rhode Island Avenue College Park, MD 20740 Phone: (301) 927-1797

Roanoke Division Director John Kanode, N4MM Rt 1, Box 73-A Boyce, VA 22620 Phone: 703-837-1340

AUTO-CALL Magazine

P.O. Box 7612 Falls Church, VA 22040-1452

Please enter my NEW RENEWAL _	Subscription to Auto-Call
For 1 Year 2 Years (Subscription rate: \$6.00 per year) (Sample copy of latest issue \$1.00)	
NAME	CALL
ADDRESS	
CITY	STATE ZIP

Make check payable to Foundation For Amateur Radio

MAY, 1991

Sun	Mon	Tue	Wed	Thu ;		Sat
			1 BARC MARC	Anne Arundel	Mobileers Shenandoah	EXAMS College Park Middletown, VA
5	6 Adams Dept of State	7 Antietam PG Wireless	8 Laurel (Inf) Pentagon S. Patuxent FAR	9 Mt Vernon No VA	10 Alexandria SMARC Vienna	11 Stafford EXAMS Anne Arundel
12	PVRC	MADRAS Fauquire	15 BARC Goddard MARC QCWA #137	Anne Arundel QCWA #20	17 RCARA Shenandoah	18 Capital City Stafford Tri County EXAMS Laurel
19	20 Ole VA Hams SPARC	21 Antietam Arlington Woodbridge	22 Laurel QCWA #20	23 St Mary's	24 New Carrollton Vienna	25 Stafford
26 MD FM HAMFES See Page 56 Adventists	27 T	28 Columbia MADRAS QCWA #20	29	30	EXAMS Stafford, VA Pentagon	

Nonprofit Organization U.S. Postage Paid Arlington, VA 22210 Permit 757

AUTO-CALL

P.O. Box 7612 Falls Church, VA 22040-1452

ADDRESS CORRECTION REQUESTED

91/09 02649 ALFRED A LAUN III K3ZO PO BOX 31097 TEMPLE HILLS MD 20757